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The First Spring Outing.

The winter and spring of 1892 will long be remembered for the visitation of the Russian epidemic, La Grippe. Un-sparing in its infliction, it numbered its victims in every household and in every avocation. Even the ornithologist was made to realize how it felt, and the walls of my house echoed and re-echoed to the form of expressing the presence and effect of the detested plague in all its variations.

When one has passed through these experiences week after week and week after week, the things that charmed before lose much of their attraction; even life itself bears a different aspect. What though the almanac indicated the near approach of spring, with its fascinations to the collector, I guessed that I shouldn't do much collecting this year and then suspended thinking long enough to sneeze a few times.

But one morning the sun came out bright and warm, the winds were hushed and I didn't hear anybody sneezing. How different one feels at such a time; the world looked more attractive, the fields seemed inviting and a thought of the woods reviving. I gently suggested the possibilities of a trip to that old hollow tree, where the Barred Owl had been accustomed annually to prepare a set of eggs for me, to my boy, and his eyes danced and sparkled with animation. But then he hadn't been through the Grippe, and of course was all ready to start, with one

foot up. "O, let me climb to the nest!" Of course I don't think I shall ever climb another tree if it be over two feet up to the branches.

It was a pleasant morning for a pleasant trip; it seemed to put new life into one debilitated by the epidemic. The drumming of the Grouse, and the startling whirr when we flushed one, stirred the blood, and we stopped to listen to the sweet song of a Purple Finch as, perched in a tree top, he repeated his delightful lay. Little families of Chickadees, cheering each other with pleasant notes, were intent on the important business of securing a breakfast, while one member of the family in different garb from the others showed that he had not been adopted long enough to learn the family language when he tried to join them in singing, his notes sounding more like the tinkling of a tiny bell. What a melodious whistle suddenly burst on the ear, loud and clear and startling in the quiet of the forest, and while the boy looked at me with inquiring wonderment expressed on his face, a flock of Fox-colored Sparrows began springing up from the ground and darting away one after another. How they can sing and what splendid voices they have. Wouldn't it be delightful, when they get home, to be there with them and listen to their chorus? I wonder where the enchanted spot may be.

A turn of the path brought in view the place we sought and a surprise awaited us—the spoiler had been there with the

woodman's axe. Instead of the tall trees that covered the spot a year ago, heaps of cord-wood were scattered all over the brown hillside, with very few of the old trees left; but we soon discovered that among those few was the dilapidated old tree whose hollow trunk had contained the nest of *Syrnium*. But little encouragement, however, could we take to ourselves, for within a few feet from the trunk was a square corded pile of split wood. With scarcely interest enough to go to the spot, I lifted my staff and gave a gentle blow upon the base and was promptly startled by seeing the big brown head emerge and with great flapping of wings speed away to a neighboring tree, whence she glared at us with her beady black eyes and called out *who-who-who-oo-ou*. By this time the boy was sitting astride the one remaining branch of the tree, which stood like an arm reaching out to grasp a support for the decaying foundation. "Three eggs this year," he exclaimed as he gazed down into the depths, "and they are away down deep, the whole length of my arm." Last year it was so that the bird could sit on the eggs and just peep over the top at an intruder. It was a beautiful set, almost globular in form, and being quite fresh they were clean and white. We returned over the hill way to visit the Red-tailed Hawks' nest as we did last year when we secured the set of three beautiful spotted eggs; but while we found the nest unchanged, it appeared to be without a tenant this year. Night nearly overtook us before we reached home, and the first spring tramps will tire one; but the pure air is invigorating and one does not seem to require such full measure of success on the first trip as later to be fully satisfied, for we unanimously pronounced it a successful and enjoyable outing.

John N. Clark.

Old Saybrook, Conn.

A List of the Birds of Randolph County, Ind., with some notes on the Mammals of the same county.

For some years previous to August, 1891, I made careful notes on the birds and mammals found in the above county, and believe the following to be a pretty accurate list of the winter birds. A few listed are truly migrants, but the dates at which they were seen would place them on the winter list. The mammal list is not complete. No Bats are given. I have seen some there, but do not know the species. The list of Mice and Shrews I believe to be only partially complete.

WINTER BIRDS.

A. O. U.

194. Great Blue Heron. Not common in winter, but one was seen late in December.
289. Bob White (Quail). Very common and much sought by hunters. The county is thickly settled, but nearly every farm has a flock or two.
310. Wild Turkey. Now extinct but formerly quite common.
316. Mourning Dove. A few remain around feeding places the entire winter.
325. Turkey Buzzard. Occasionally seen during warm winters.
333. Cooper's Hawk. Has been taken in the winter.
337. Red-tailed Buzzard. Quite common at all times.
339. Red-shouldered Hawk (Chicken Hawk). Common for a hawk.
352. Bald Eagle. One is occasionally seen.
368. Barred Owl. Very common.
373. Screech Owl. Common. More of the gray color than the brown.
375. Great Horned Owl. Abundant for this species.
376. Snowy Owl. Two were taken in the county in December, 1891, the only ones I have ever known.

393. Hairy Woodpecker. Can be seen any day in the year.
394. Downy Woodpecker. Common, often found with *D. villosus*.
406. Red-headed Woodpecker. Some years it remains all winter but others it is not seen during the cold months.
409. Red-bellied Woodpecker. Occasionally seen, but it is not common.
412. Flicker. Common during warm winters, rare when very cold.
474. Horned Lark (Shore Lark). It is not uncommon to find a flock around a feeding place.
477. Blue Jay. Can be seen almost any time.
488. Crow. A few remain all the year when the winters are mild.
559. Tree Sparrow. Very abundant, often found with Junco hyemalis.
567. Snow Bird. Common.
581. Song Sparrow. I have seen a few in midwinter.
593. Cardinal. Common for this species.
- English Sparrow. Everywhere.
727. White-bellied Nuthatch. Common.
731. Tufted Titmouse. Very abundant.
735. Black-capped Chickadee. I took one Feb. 12, 1891.
761. Robin. Several have been seen in January.

MAMMALS.

- Didelphis virginiana* (Common Opossum). Formerly common, but now very rare. A few are killed each year.
- Lepus sylvaticus* (Gray Rabbit). Very abundant.
- Erethizon dorsatus* (Canada Porcupine). Quite common twenty years ago, but now not found.
- Fiber zibethicus* (Muskrat). Common around swamps and ditches. Trapped for fur.
- Arvicola pinetorum* (Pine Mouse). One specimen was taken January, 1891, by

- L. J. Driver, of Farmland, Ind. We put out many traps in the same region, but could get no more.
- Arvicola pennsylvanicus* (Meadow Mouse). Common everywhere.
- Calomys americanus* (Dormouse). Common in the woods and along fences.
- Castor Fiber* (Beaver). Not found at present, but a few old beaver dams can be located.
- Arctomys monax* (Ground Hog). Occasionally found, formerly quite common.
- Tamias striatus* (Chipmunk). Very common.
- Sciurus hudsonicus* (Red Squirrel). Very rare.
- Sciurus carolinensis* (Gray Squirrel). Common.
- Sciurus niger ludovicianus* (Fox Squirrel). Quite common.
- Sciuropterus volans* (Flying Squirrel). Common. In November a few years ago I found fifteen in one old stump.
- Blarina brevicauda* (Mole Shrew). I took one specimen in 1891. Did not see or hear of any others.
- Blarina exillipes*. I have one specimen, which I caught running on the snow in a road at night.
- Scalops aquaticus* (Common Mole). Common but not abundant.
- Procyon lotor* (Raccoon). Common. Trapped for its fur.
- Mephitis mephitis* (Common Skunk). Occasionally found. Formerly abundant.
- Putorius vison* (Mink). Common in some localities.
- Putorius longicauda* (Weasel). Formerly abundant, now rather rare.
- Vulpes vulpes* (Red Fox). A few are taken each year. *Ulysses O. Cox*. State Normal School, Mankato, Minn.

George O. Welch, the Salem, Mass., taxidermist, reports that the season has been an unusually busy one with him.

Domestication of the Canada Goose.

It is thought by a great many and sometimes appears in print that the Wild Goose will not breed in confinement, or, in other words, in a domesticated state; but as an experiment of this kind has come under my immediate observation, I will relate it in detail for the benefit of the readers of the ORNITHOLOGIST AND OOLOGIST. It appears that some one found them breeding along the banks of a river in Minnesota, and while the old goose with her young was feeding out on the land, he ran up between them and the river bank, and of course the young became an easy prey, as they were too young to fly.

A pair of these young geese were sent to Chauncey Baker, of this place, who, after keeping them awhile, sold them to Luther Briggs, of this vicinity. Not long afterwards the female died, leaving the gander alone; and after he became fully matured Mr. Briggs procured a tame goose to try the experiment of crossing them, which proved a success, for several broods of hybrids were raised which had all the characteristics of the wild variety and resembled them so much in color that no one but an expert could tell them from pure bred Wild Geese; but of course they were sterile and would not breed. On one occasion, during the fall migration, some of these half breeds went South, and were not seen again till the following summer during oat harvest, when they returned and brought with them some pure wild ones. The half breeds came to the barnyard, but the wild ones kept to the fields. Mr. Briggs tried to capture them, but failed and they soon left, while the half breeds remained at their old home. After this he cut off one wing, at the first joint, of all the young ones he raised, for they were very restless during the migrating season. In the spring of 1886, Mr. M. L. Rice, of Utica, Michigan, procured a

pure-bred young wild gosling that was caught somewhere in Dakota. It proved to be a female, and he let Mr. Briggs take it to cross with his old wild gander on shares, providing they would breed, Mr. Rice reserving the right to buy Mr. Briggs' should he ever wish to sell them. Of course Mr. Briggs got rid of all his other Geese and kept only the pair of pure wild ones, and in the spring of 1889, when the Goose was three years old, she built her first nest in a piece of woods and laid seven eggs, and while she was sitting, a Fox or some other wild animal destroyed all of the eggs and nearly killed the Goose, biting her badly about the neck; and in the spring of 1890 Mr. Briggs confined them during the breeding season in a large garden near the house where there was a creek running through its centre. Near this creek she built her nest and laid five eggs and in due time she hatched every egg. When the goslings were about half grown one of them died, and the other four came to maturity; and in the spring of 1891 the old Geese were again confined in this same garden and near the creek. The female again built her nest, and when she had laid three eggs Mr. Briggs removed them from the nest for safe keeping and added a little more straw to the nest, which broke her up. She never went near it again. They afterwards found one egg in the creek, which was badly water-soaked and stained. I offered him one dollar for one of these fresh eggs, but he would not sell it. He kept the eggs some time and then set them under a hen. The water-soaked egg got broken under the hen and the other three were addled. I procured one of these addled eggs as a specimen for my cabinet, Robert Alexander got one, and the other was given to a friend of the Briggs family.

Again, in the spring of 1892, the female built her nest and laid seven eggs. Mr. Albert Durfee procured one of these eggs

while fresh for his cabinet and the other six hatched; but about the time the Goose was sitting Mr. Briggs died, and in settling the estate and when these goslings were about half grown, they were all shipped together, twelve in number, to M. L. Rice, of Utica, Michigan, who, by agreement with Mr. Briggs, held a first claim on them. The young goslings never required any feeding but picked their own living with the old Geese. We hope to hear more about Mr. Rice's success with them in the future; but this article includes all of their history up to the present date.

James B. Purdy.

Plymouth, Wayne Co., Michigan.

Nesting of the Cerulean Warbler.

How well do I remember finding my first Cerulean Warblers' nest.

It came about in this manner: One pleasant day in May, 1890, while out collecting skins at Greenwood, a suburb of St. Louis, on the Missouri Pacific Railroad, and about one half mile from my home, and while prying around in a small but beautiful piece of forest through which winds a small creek which goes by the name of the river Des Perces, pronounced De Pere, I spied a small bird flitting about in a tall but slender sycamore. On first appearance I took the tiny bird to be a Vireo of some species, and sat down to watch its movements for awhile before shooting. Finally it disappeared, and I had just begun to be vexed at such stupidity in allowing the bird to escape, when it made its appearance again, and with, I thought, something in its mouth; but at such a great height I was not sure, so I decided to wait awhile, and was rewarded with unmistakable signs of nest building. As I could see nothing of the nest, I concluded that the nest must be just begun, and so I left, intending to visit the tree again in about a week; but it was ten

days before I again visited the locality, and with a good glass I scanned each and every branch but no hanging nest; but on a horizontal limb about sixty-five feet up and about twelve feet from the trunk, and where the limb forked out, I thought I noticed an undue bulging of the limb and decided to investigate; so after considerable hard work in the way of shinning I reached the suspicious limb, and way out on the end I spied a tiny nest containing two eggs, but no bird in sight, nor did it show up. Not being prepared to secure the nest, and wishing a full set, I left.

Four days later I returned with a long clothes-line, a chalk line, large jack-knife and some cotton, also a younger brother to help. After another hard shin, I reached the branch and begun operations by first wrapping and tying one end of the clothes-line around the limb containing the nest and about twenty inches from the trunk; I next passed the line over a limb just above the one holding the nest, bringing the line down and securing to the lower limb; my next move was to fasten a line to the fork containing the nest; much easier said than done, but I finally landed a chalk line with a weight attached in the right place, and lowering the same to the ground my brother attached a short line, which I was about to draw up in position when I thought to myself, How will I tie it away out there? But, no sooner said than done, I had my brother tie a good stout stick about a foot long to the end, and climbing higher up I hauled the rope up and secured it to the limb above; thus I had the limb so it could not fall or turn over after it was cut. I almost forgot to say that all this rumpus proved too much for the bird, who up to the time I threw the chalk line over the limb a couple of inches from her had remained on the nest. She now left the nest, hopping all round it and continually pecking at the chalk line and scolding like a Wren or Vireo.

I then saw what a rare find I had made, and immediately let a string down for my little gun and shot Mrs. Warbler from my perch in the tree. Along about this time came Mr. Warbler, attracted by the noise made by his spouse, and I took him in also. Now to my story. After securing ropes my next step was to place a roll of cotton in the nest, which I did by putting it on a long light pole and crawling out as far on the limb as I dared. I next begun cutting the green limb, which was nearly three inches thick. After chopping away for a half hour I succeeded in severing the limb, and after much care in handling the lines I finally secured the nest and five fresh eggs. After securing this nest it was no trouble for me to find their nests right along, and during the rest of the season and the one following I found no less than forty nests and secured about twenty-five sets of eggs. They were all located in sycamores, with the exception of two, which were in oaks, they all being placed way out on a limb in the same manner as the Wood Pewee, and from 40 to 75 feet up. The nest very closely resembles a typical nest of Traill's Flycatcher, only smaller, being made of precisely the same material both inside and out. A typical nest measures, inside diameter 1.6 in.; inside depth 1.1 in.; outside diameter 2.6 in.; outside depth 1.5 in. Out of a series of twenty-five nests five contained five eggs, sixteen four eggs and the balance three eggs. The eggs cannot with certainty be distinguished from those of the Yellow Warbler.

Philo W. Smith, Jr.

St. Louis, Mo.

[The two sets of eggs of Cerulean Warbler in my cabinet (with parent birds) are entirely different from those of the Yellow Warbler. The nests also are very different from those described by Mr. Smith. — J. P. N.]

A Few Days Among the Blue-winged Warblers.

My experience of past years with this species (*Helminthophila pinus*), has been that on the last of May or the first of June, when I found a nest, the eggs were oftener heavily incubated than fresh, so the past season I thought I would start a week earlier.

I left the city on May 21st, my object being to locate the birds on their breeding sites and see if they had commenced nest building. I spent the afternoon of the 21st, all day of the 22d and 23d tramping over the country wherever I knew of a suitable site, and at the end of the third day I had an attack of the blues of the very worst kind.

The weather for the three days was raw and cloudy and I located only one pair of birds. I felt very badly over my poor luck and told my farmer friend who goes with me on all my egg tramps and knows as much about them as I do, but who is no collector, that I thought the birds had deserted their old breeding grounds, and that I did not think I would bother with them any more that season as I felt sure they were not there. He had more courage than I had, however, and said that he was not going to give up without another fight when I left him at the depot on Monday evening, where he had taken me to meet my train for the city. He told me that the first bright, sunny day he would look after them again and that I would hear good news from him before the week was out.

I did not have much hope of receiving the good news he promised, but imagine my surprise when on Friday of that week I received a letter telling me to come up on Saturday as he had found two nests.

On the evening of the 28th I took the train for my friend's place, he meeting me at the station when the train arrived.

After a drive of five miles and a good night's rest, on the 29th I was in good trim for work, and after breakfast we started out. The first thing to be done was to examine the two nests my friend had found, which were both in the same thicket about two hundred yards apart. The first nest contained four eggs of the Warbler and one of the Cowbird. When it was found it contained two eggs of the Warbler and the Cowbird. I did not disturb this nest as I was going to stay until the next day. The second nest was about half finished, but my friend declared that there had been nothing added to it since he found it, but on June 9th he took a set of five fresh eggs from it.

Our next find was a nest containing *six* fresh eggs in a small thicket on edge of a wood where I never found a pair before and have been hunting over the same ground for the past ten years. This was a grand surprise as I had never found a nest containing more than five eggs, but it seemed as if this was my lucky day and made up of surprises, for after packing the six little beauties safely in my box we started again and after a tramp of a half mile we entered a heavy wood; after tramping through it for some distance we came to a small stream of water and a clear spot containing about an eighth of an acre, with a few raspberry vines scattered about.

As we entered the clear spot what was our surprise to hear the notes of the Blue-wing above our heads. It took us but a moment to find the nest which contained three fresh eggs. I left them and my friend secured the nest and five eggs for me on June 2d. After leaving this nest and tramping another half mile or more we came to an old breeding site where for the past three years we have found a nest of this species. The site is a narrow strip of ground between the last furrow of a ploughed field and an old worn fence dividing the field from a large wood, covered

with tall grass, blackberry and raspberry vines. The Sunday before we had been over this site and I thought it was impossible for a nest to be there and we not find it, but such must have been the case, for upon coming near it I sent my friend to examine a good site for a pair to take up in, telling him I would examine the old one but with no hope of success. I went the length of it, looking carefully into every place large enough to contain a nest and had nearly reached the corner of the fence and almost the last vine when out hopped the little Blue-wing. I stepped up to the vine, looked into the nest, counted the eggs, rubbed my eyes, looked and counted again, rubbed my eyes, counted the third time and yelled to my friend the number, *seven*. After packing them, we threw ourselves on the ground in the shade of a large oak and talked the matter over, and we both came to the same conclusion that the nest must have been there when we looked for it a week before.

After taking a half hour's rest and refreshing ourselves with a drink of cold spring water, we started for another site, where we found a pair of birds. The season before this was a narrow strip of clear ground on the edge of a wood about an eighth of a mile in length, overgrown with bushes and vines of many different kinds. We started in at the west end and after going about half way we knew the birds were there by hearing their song; we hunted the whole length of the wood and came to the conclusion that they had either hidden their nest so well that we overlooked it or else had not commenced it yet, when reaching the end of the wood where a fence divided it from a clover field there was a small cluster of raspberry vines; stepping over to them and looking on the ground I saw the nest with little or no protection; it contained two eggs. On June 3d my friend secured the nest with five eggs.

On the afternoon of May 30th I visited the first nest spoken of. It contained five eggs of the Warbler that were cold, which led me to believe the female would have laid at least one more; but as the nest was placed in a bunch of grass and the crows had been tramping very close to it, I was afraid to leave it another day, and thinking a bird in hand was worth two in the bush I packed the eggs in my box and started for my home feeling well paid for my trip, bringing home one set of seven, one of six, one of five, and receiving the other three sets of five in good condition when the sets were completed.

On Sunday, June 12th, myself and friend went over the same ground and found the second nest of the pair from which I took the seven eggs. It was placed in a bunch of tall grass about 200 feet from the site of the first one and contained four eggs; incubation commenced. About 300 yards from this nest we found one containing four eggs that we overlooked on the 29th of May; incubation was far advanced. On our homeward trip we found the second nest of the last pair we found on the 28th about 50 feet from the old site, containing four eggs; incubation commenced. I do not believe in robbing a pair of birds of their eggs the second time; my object in going after them this time was to find out what their second clutch would consist of. I did it once before and never found but four eggs, and by this I am led to believe that they rarely, if ever, lay more. I hope to spend several more pleasant days looking after them the coming season.

I would be pleased to have other collectors give their experience with this species. To my mind it is one of the most interesting of the Warbler family.

Philadelphia.

Isaac S. Reiff.

R. H. Carr reported a Scarlet Tanager taken at Brockton, Mass., on November 11, 1892.

A Comparison of the Nesting Habits of the Long-billed and Short-billed Marsh Wren.

The Short-billed Marsh Wren (*Cistothorus stellaris*) seems to be confined to certain sections for the nesting season. I know of but two places where they are to be found in numbers, and as these places are somewhat under thirty miles from my present residence, and, so far as I know, but one other oologist besides my brother and myself knows about them, the birds are disturbed very little and consequently congregate in considerable numbers every year. The Long-bills (*C. palustris*) are common almost anywhere.

The Short-billed usually has the first nest completed and eggs laid by the last of May and the Long-bills about a week later; as at that time of the year the grass is not very long, the nest is often built so that it almost touches the hummock from which the supporting grass grows, but I have never seen them actually on or in the hummock. As a rule it is built some distance from the ground, and one, containing seven eggs, was built in the top of the bunch of the grass—the tops of the live grass being woven in and forming part of the nest.

I have noticed that while both species build in wet meadows (in this case freshwater meadows) the Long-bills invariably build in the tall rank grass and near some river or brook, while the Short-bills are equally particular in choosing a shorter and much less rank kind of grass. When the first set is laid, the grass all over the meadows is rather short and not very rank, so that the nests may be anywhere and it is nothing but pure luck when one is found; but later in the season, when most of the grass is long and rank, the Long-bills stay wherever they happen to be, while those of the other species come from all parts of the meadows, and con-

gregate in the two places before mentioned, where the grass does not grow much over two feet in height and is not at all thick or rank. At this time of the year, with a little patience, almost any number of nests can be found.

In choosing a nesting site they (*stel-laris*) do not seem to be at all influenced by the position of the streams, as some of their nests were within ten feet of the flowing water, while others were as much as fifty yards off in the marsh, with absolutely nothing to indicate their whereabouts.

The construction of the nests seems to be as different in the two species as their location, but neither ever use any mud. The Long-bills' nest is a very bulky piece of work and is composed externally of the soft pieces of the dead, coarse grass that it finds on the hummocks where it builds, while the other uses the fine grass before described, taking the fresh green grass for the outside and the softer dead grass for the inside next to the lining, and makes a much smaller nest. This makes the nest of the latter much more difficult to find, as it is of the same color of the surrounding grass.

Both birds build from two to six decoy nests to the best of my belief, for each pair seems to have a smaller area of the marsh to themselves for building purposes, and the number of nests in each "bunch" varies between these two figures. I think that one reason for these decoy nests being built may be for convenience in the event of the first nest being robbed or destroyed, as I have taken a set of eggs from a nest and a week or so later, on going to a decoy nest close by the position of the old one, found three fresh eggs in it.

The lining materials are the same for both birds, but vary considerably, as it is in some nests of very fine grasses, others entirely of feathers, while others will be lined with the silky tufts of that variety of

tufted grass which is so common in every meadow.

The Short-billed Marsh Wren has a curious habit of often pulling to pieces any nest that has been handled, whether decoy or otherwise, so long as it has not begun laying in it, for I have repeatedly placed a stick a few feet from the nest with the bearing noted, only to find the nest gone afterwards except for a sort of thin skeleton of grass.

If the nest contains a set of eggs I do not think it is possible to make them desert, as the two following incidents will show.

On June 1, 1892, I collected a nest containing six eggs, but, for some reason, I did not have an egg-box (I cannot understand how it happened), so I left the eggs in the nest and laid it, entrance up, on the hummock from which it had been cut, and began to search for other nests further off in the marsh. In about half an hour I returned, walking rather carefully in order not to overlook it or step on it. Just as I reached the edge of the little clearing of trampled grass and saw the nest, the bird jumped out of it and flew away. I felt meaner for taking that nest than for all the others I have taken put together. I do not know whether she would have hatched the eggs or not, but she must have been on the nest for some time before being frightened away, as the eggs were perfectly warm.

In the other case my brother found a nest on July 16 containing seven eggs, and, wishing to show it to a friend just as it stood, stopped the entrance with a small plug of grass. On July 24 he visited it again and found that the top had been hollowed out, enlarged and lined, so as to make another perfect nest just above the first one; the second compartment contained three eggs. Foolishly enough, we left the nest to see if any more eggs would be laid, but on visiting it two days later,

the upper nest had been cleaned out by a snake, although the lower set was safe.

The Long-bill, on the contrary, is very easily offended. June 5 this year I found a nest containing three eggs and left them, wishing to take the full set a few days later. The nest was in the middle of the meadow and could not be reached without a boat, so I was not able to go to it again until June 17, when I found it deserted (the three eggs being cold and wet), although I had handled it only as long as it was absolutely necessary to ascertain the number of eggs. Although the nest was deserted, the birds were close by and as noisy as ever, and after a short search I found the second nest in a hummock hardly five feet from the one in which the first was built. This contained five eggs slightly incubated, probably the balance of the set that would have been laid in the first nest. I think the second nest was a new one and not a decoy, as otherwise I should have noticed it the first day.

Neither species, so far as I have seen, is at all particular about the points of the compass, as far as the nest entrances are concerned, for the openings are just as often on any other side as they are on the south side. There does not seem to be any rule for this, unless, possibly, that when the nest is not in the centre of the hummock the entrance is usually in the part nearest the outer edge. When on the edge of a river or brook, it faces as often away from as towards the water. The entrance is usually in the side; but in one Long-bills' nest that was built in a bunch of "cat-o'-nine-tail" leaves, the nest was longer and more narrow than usual and the entrance near the top. This is an unusual case, but there did not seem to be space enough for a hole between the leaves.

The second set of the Short-bill is usually laid by the second week of July, but sometimes a week or ten days earlier. There are from five to seven eggs in this,

just as in the earlier sets. The Long-bills lay again about the first of August, but a set of four is the largest I have seen at that date. The largest set I have taken at any time contained six eggs, but that does not appear to be considered a large set.

The horizontal diameter of the Short-bills' nest is usually four inches, and the vertical four and one half; while the Long-bills', although occasionally as small as that, are more often very bulky, measuring four and one half by six inches. The entrance of the nests of both species is about three-fourths of an inch.

The eggs of both are about the same size, averaging .67 x .47. This is a larger measurement than is usually given for Short-bill's eggs, but I have measured quite a number and they do not vary much from it. Their shape is somewhat variable, some being almost exactly like a miniature Guillemot's egg, but the majority are about the shape of the average Warbler's egg, the width being equal to a little over two-thirds of the length. Some of the Long-bills' are nearly spherical, but none of the other species are of this shape.

The eggs are nearly as highly polished as those of the Woodpeckers, the Short-bill's being pure white while those of the Long-bill are light brown, usually evenly spotted over the entire surface with slightly darker dots, sometimes, however, they are very heavily marked with large blotches of dark brown, with two or three small black dots near the large end, but I have only found one set marked in this way.

The season of incubation lasts about ten days and in the second set I believe is somewhat assisted by the heat of the sun, as I have never found the bird on the nest in July, while in May and June it is not very difficult to see the grass moving slightly as they leave the nest and then to flush them a little way off.

The songs of the two birds, although

similar, are easily distinguished after listening to them together for a short time; there is not much music about it, but it is strong and lively, and they seem to put their whole strength into it. When the Short-bill's song is heard, the short grass and the nests are not far off, and that is how I first found them. When the nest is approached, they give a very deep, guttural *chrr-chrr-chrr*, which appears to be their alarm note.

If in hunting for a Short-bill's nest one finds a Long-bill, or *vice-versa*, the better plan is to hunt somewhere else, as, for some reason, the two species never build anywhere near each other. Altogether the two differ almost as much in habits as their eggs do in color.

I will also add that if, while hunting, the bird comes close and scolds, the chances are nine out of ten that the nest is nowhere near, the tenth chance being the case when there are young in the nest.

C. W. Bowles.

Winter Notes from Stephentown, New York.

“Better late than never.”

A few days ago, while looking over a box of notebooks, I found a few notes which I wrote up last winter with the intention of sending them to the “O & O.” Other matters engaged my attention at the time, and they were forgotten. I looked them over; they did not seem unseasonable at that date, November 5, with a howling northwest wind and the air outside thick with frosty flakes of the first snow. They interested me. Perhaps they will you, should the editor deem it best to impose them upon his readers.

WINTER NOTES, 1891-92.

On the whole, we have had a rather mild winter in this locality. The mercury has dropped to fourteen degrees below zero several times, but the cold snaps were of short duration.

Flocks of Black Ducks noted as late as Christmas.

A few Belted Kingfishers have remained with us all winter. It seems rather odd to hear their rattling notes, and see them flash by over the ice-bound streams. My first record of their wintering here.

Tree Sparrows have been here in abundance since their arrival from the North last fall. Every morning I am greeted with a medley of their low, sweet notes, wafted across the creek from a tangle of alders, rank weeds and vines on the opposite bank from the store.

Slate-colored Juncos have also wintered here in small numbers.

Mourning Doves noted up to date. One has stayed around the grist mill the past two weeks, feeding on the grain thrown out to it by the miller.

In December one of our local trappers caught a magnificent specimen of the Bald Eagle in a fox trap. The same man has taken several fine Red-tailed Hawks in the same manner.

Meadow Larks noted February 2, and several times since.

It is with great pleasure that I record the presence of Redpolls in considerable numbers. Not a single specimen was noted last season, while in the fall of 1889 they commenced to arrive in large flocks about the 15th of November, and were here in multitudes all winter, staying until late in the spring of 1890.

My time afield has been very limited this winter. Have seen no Snowy Owls, Pine Grosbeaks, Pine Siskins or Crossbills myself. All, with the exception of the Pine Siskin, have been reported to me several times by hunters. A flock of twenty Horned Larks, the true *Alpestris*, were seen February 5.

Snowflakes have been seen in immense flocks, at intervals, since the middle of December.

Prairie Horned Larks were again noted

on February 8, a flock of ten feeding on the horse droppings in the road. Seen almost daily since. None were noted during December and January.

Our winter residents are all noted in about the usual numbers. On short tramps through wood and brush near the village, I flushed Ruffed Grouse much oftener than I expected to. It's a wonder to me that we have a single one of these beautiful birds left. Reason: this locality is blessed with a gang who make hunting for the markets a business.

Indeed extermination has advanced rapidly during the past ten years. Last fall I stood a sunflower stalk, crowned by a mammoth seed head, up against the crotch of one of the apple trees in the yard, and for about a month a pair of White-breasted Nuthatches have made daily visits to the yard to feed on the seeds. They are getting quite tame, and will come to the stalk for seeds when I am standing so near I could touch them with my hand. After picking out a seed they fly to a large elm twenty feet away, stick it into a crevice of the rough bark, and then hammer it open with their bill, devouring the contents, seemingly, with great gusto and a profusion of Nuthatch talk.

I noticed last winter that the Nuthatches did not eat all of the seeds which they carried to the big elm, but left many wedged in the crevices of the bark. I found later that they had a purpose in doing this, as they made frequent visits to the tree to feed on them until along into the summer.

February 10, while at Pontoosac Lake, near Pittsfield, Mass., on a fishing trip I noticed numbers of Crows sitting on the trees along the shore. Now and then one of them would swoop down near the holes where the lines were set, and pick up something. I soon found it was the dead minnows they were after. A resident of the locality told me that on the day before

they stole two fine pickerel from one man. We have only a small flock of English Sparrows in the village this winter. The Great Northern Shrikes nearly exterminated them here last winter. Speaking of Shrikes, reminds me that I haven't seen a single specimen of *borcalis* this winter.

Silence now reigns on wooded hillside and in timbered swamp, where not many evenings since the loud hootings of the Great Horned Owl were heard nightly, which tells us that Mrs. Bubo now covers her treasures white, and that we must throw business cares aside for a day afield, if we expect to get fresh sets this season.

The increase in numbers and activity of the Crows, the peculiar, joyous notes they are now uttering, foretell the near approach of spring, and warn us that ere long there will be a break up, and we shall be gathering notes on the Spring migration.

Benjamin Hoag.

February 20, 1892.

Early Nesting of the California Thrasher.

January 6, while hunting for Partridge among the foot-hills, I discovered a nest placed about eighteen inches from the ground in a sage-bush. On coming nearer a bird was noticed sitting on the nest, which flew as I approached. It was readily identified as a California Thrasher. I was greatly surprised to find that the nest was not an old one but contained three eggs of this bird, perfectly normal in size and markings. They were far advanced in incubation, so far, in fact, that they could not be preserved and the young squirmed when taken from the shell.

With this exception, the earliest record I have of the breeding of this bird is April 24, when young were found old enough when young were found old enough to leave the nest, and the latest is May 23, when a set of three fresh eggs was taken.

H. M. H.

Riverside, Cal.

Distribution of Illinois Birds.

Last fall, Mr. W. E. Loucks, of Peoria, and myself decided to attempt the task of ascertaining the geographical distribution and breeding range of certain Illinois birds.

In following out this plan, we have selected a number of birds for 1893, and ask of the ornithologists of Illinois certain information about them. A number have responded to the circulars sent them asking aid; but we still desire others, especially in the central and southern parts of the state.

We earnestly request any one having information will write to us, and if circulars have not been sent to them, we will be very glad to furnish them with any information in regard to the work.

Now about the information we want.

We do not ask you to make future observations. We desire any information of which you may now be possessed, however little.

If you have not found the species, it is important, for several of those on the list are only found in certain localities, and we wish to have them fully defined.

The reports may all be sent in at one time, or monthly, which will give an opportunity for observation this season for any data you may not have in your notes should you desire to obtain it.

We would be glad to have you state the abundance of the species in your locality and as nearly as possible how many nests found, number of eggs laid, and place of building.

If you report monthly your report should be in by the *tenth* of the preceding month, in order that it may be combined in time for publication.

To make a success of this work we will need all the aid we can get, and our work will be valuable in proportion to the number of localities we receive reports from.

Any one who can contribute even but a little is requested to send it in.

A list of those who will aid us will be ready for the February "O & O." and if possible a description of the locality.

The first report will be in at that time.

It is our hope at some time in the near future to have a catalogue that will give the geographical distribution of every bird found in the state, but the amount of aid we receive now must determine our future course.

Dr. A. C. Murchison.

Kewanee, Ill.

Abnormal Coloring of a Song Sparrow's Eggs.

On June 18, 1892, I found a nest of the Song Sparrow containing four eggs, three of the Sparrow and one of the Cowbird. There are no two alike and to the observer they present the appearance of four different species of eggs, so greatly do they differ in their marking.

No. 1. Size .80 x .60: is a very handsome egg. The ground color of the larger end for about one half its length is light brown, the remaining half pale blue, immaculate. On the larger end there is a blotch of reddish brown about three eighths of an inch in diameter and a few scattering spots of the same color. The shading of the brown half into the blue is quite abrupt.

No. 2. .80 x .59; ground color, pale blue, immaculate for about two thirds its length, with a wreath of reddish brown, and a few scattering spots of light and dark brown around the greater end.

No. 3. .75 x .55; grayish white, speckled all over with various shades of reddish brown. The spots are larger and more confluent at the larger end. With the exception of its slightly larger size, it is indistinguishable from the typical Field Sparrow's egg. There was nothing peculiar in the material or situation of the nest, neither is there any doubt of their identity.

G. L. H.

Bethel, Conn.

THE
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A MONTHLY MAGAZINE OF

NATURAL HISTORY,

ESPECIALLY DEVOTED TO THE STUDY OF

BIRDS,

THEIR NESTS AND EGGS,

AND TO THE

INTERESTS OF NATURALISTS.

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HYDE PARK, MASS.

The O. & O. is mailed each issue to every paid subscriber. If you fail to receive it, notify us.

In presenting to our readers the volume of the "O. & O." of which this is the first issue, the same general plan will be followed as in 1892.

While we shall present extracts from other publications and clippings from the press, they will not be used to the exclusion of valuable and interesting notes and communications that may be sent in.

We are continually receiving letters of praise, advice and criticisms from our friends, which are cordially welcomed and carefully considered. We shall endeavor to manage the publication to meet the popular views of the *majority* of our subscribers.

We again announce for the information of our many new friends, what is well understood by the old subscribers, that the articles and notes that are used are all free-will offerings.

We do not pay for contributions.

The magazine is a medium for exchange of practical knowledge between naturalists, and the benefit that is thus obtained is the remuneration.

We are particularly desirous of having

notes of interest sent to us from all parts of the country.

ADVERTISING.

It would seem needless to call the attention of parties who have specimens for sale or for exchange to the value of an advertising medium of a magazine like the "O. & O.," which is circulated among the class of people who are interested in such goods throughout the entire country. Specimen copies are sent by us to every person whom we know to be interested in natural history, and are not sent out at haphazard.

The following letter is to the point:—

"WASHINGTON, D.C.

"PUBLISHERS OF THE 'O. & O.'

"Gentlemen,—Thanks to my ad. in 'O. & O.,' I obtained a cane gun from a party in *Missouri* after exhausting all other means of trying to obtain one. There does not appear to be any for sale by dealers in such goods, and up to the time of getting an answer from my ad. I had despaired of obtaining one. *E. J. Brown.*"

"*Second-class Postage.*—The terms and conditions of the postal law should be so definite as to be easily understood. It works great injustice and loss to publishers to permit the Postmaster-General to construe it, as he does at present, according to his own individual wishes. Favoritism and oppression have both been practiced in this particular by the present Postmaster-General. This statement is susceptible of positive proof. An opportunity for such arbitrary rulings should be made impossible."

The above suggestion to Congress is worthy of attention. For some time past a vigorous protest has been made by a New York publication, "Printer's Ink," against what is claimed to be a gross injustice. The charge has been of such a clear, positive and ringing character that it would seem as if it was time for the public to insist upon a full investigation.

Brief Notes, Correspondence, and Clippings.

"I am at home to-night midst a confusion of manuscript proofs, birds and mammals in my museum hall. The number of birds amount to something over 1500, half of which number are my own work; many have been sent by other taxidermists for the World's Fair exhibit. Chief among my own work is an African Ostrich and four Flamingos. The mammals number seventy-five, from the Chipmunk to the Bear. About twenty heads of various animals, including a fine Buffalo head of my mounting 15 years ago. The fishes and reptiles have had a share of my attention in all manner of preparation.

"If no unforeseen accident happens, I shall be able to deliver my book soon after the 25th."

Oliver Davis.

Pine Grosbeaks were very plenty the last of December. My brother and myself saw over 40, in scattered flocks of 3 to 14, at Ponkapog, Mass. *J. H. Bowles.*

At Dedham, Mass., they are reported in numbers during the first three weeks in January.

The following gentlemen were elected officers of the California Academy of Sciences on January 3, 1893:—

President, H. W. Harkness; first Vice-President, H. H. Behr; second Vice-President, J. G. Cooper; Corresponding Secretary, T. S. Brandegee; Recording Secretary, J. R. Scupham; Treasurer, L. H. Foote; Librarian, Carlos Troyer; Director of Museum, J. Z. Davis; Trustees, W. C. Burnett, Charles F. Crocker, D. E. Hayes, E. J. Molera, George C. Perkins, Adolph Sutro, John Taylor.

Mr. George Atkins, of Pittsburg, Pa., has a very fine collection of live Pheasants, including Golden, Silver, Lady Amherst, Reeves, English, Mongolian, Versi-

color Hoosfield-blue, Lyn-eaters, Elliott, White and several crosses.

I have just mounted three Golden Eagles killed in the vicinity of Columbus, Ohio.

Oliver Davis.

"John Bachman—Letters and Memories of his Life," \$2.00, is a book that should be in the hands of all ornithologists. We have a few copies on hand.

The large fire in Boston on January 10 came very near burning the building occupied by our friend, Joseph M. Wade. The surrounding buildings were destroyed. In the midst of the excitement Mr. Wade remained at his post, in order that his publication might be out on time.

We procured several fine Lesser Prairie Hens in the meat this month.

Nesting of the Carolina Wren.

While the Carolina Wren is reported as occurring in nearly all parts of the state of Pennsylvania, it is exceedingly abundant along the Wissahickon Creek, Philadelphia.

This rather shy bird spends most of its time in the vicinity of water, around bush piles and old logs, and may often be seen circling about the trunks of trees, collecting beetles and insects.

I have found as high as thirteen nests of this species in two days, all of which were built in the ruined walls of old houses and mills, except two, which were constructed in holes in stumps of trees. The nest is composed of moss, leaves, weeds, and grass.

The eggs, generally six or seven in number, creamy white, spotted and blotched with reddish brown and lilac, measure about .56 x .75 to .60 x .80.

I would like to hear (through the columns of this paper) from some of the readers of the "O & O." as to the abundance of the Carolina Wren in their States.

M. L. C. Wilde.

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No. 2.

Distribution of the Long-Eared Owl and Cooper's Hawk in Illinois.

A synopsis of the plan of ascertaining the distribution of some twenty-two species of birds in the State of Illinois, was presented in the preceding number of this magazine. It is now intended to say a little regarding the material to be used and the contributors of the same.

This material, on which this and succeeding articles will be based, consists of the notes and observations contributed by those who have collected and observed in Illinois fields, and of the valuable information secured from lists and catalogues, both State and local.

A great deal of difficulty has been experienced in inducing collectors to furnish their notes or observations on these species. Many circulars were sent, many letters written, many entreaties made, but without avail. Probably one out of every dozen would respond with a favorable answer; others found their daily duties too pressing to afford any assistance; some paid no attention to the request, and a few were skeptical. It is with pleasure, however, that we are able to present the list of contributors herein given. This list is not as large as we had hoped to have it, and there are great gaps in certain portions of the State which need filling. Information is still desired from all, but more particularly from those in the central, east-central, southern and western parts, and also from those living in ad-

joining States, in close proximity to the State line. Although the less experienced collectors are welcome, we should like to see the more experienced ones take hold. There are some in the State able to do much for the work, and we trust they will give this matter their prompt attention.

Catalogues of the birds of Illinois are not exceedingly numerous, but those we do have, however, make up in quality that which they lack in quantity. I shall not enter into detail on an ornithological bibliography, but make brief mention of the more important lists which will be consulted.

Probably the oldest of any note is Kennicott's "Catalogue of the animals observed in Cook County, Illinois," but more modern lists have since superseded it. Mr. Robert Ridgway figures very prominently in Illinois ornithology, and his numerous papers are valuable additions to our libraries. Although many of the readers are undoubtedly well acquainted with these, special mention is made of "The Ornithology of Illinois," by Robert Ridgway, Part 1, Natural History Survey of Illinois. No comments are necessary; we find it of great value. Mr. E. W. Nelson's two valuable papers, "Birds of Northeastern Illinois" and "Notes upon birds observed in Southern Illinois between July 17 and September 4, 1875," are too well known to be dwelt upon. "Migration in the Mississippi Valley," by W. W. Cooke, carried on some years ago on a co-operative plan, needs no

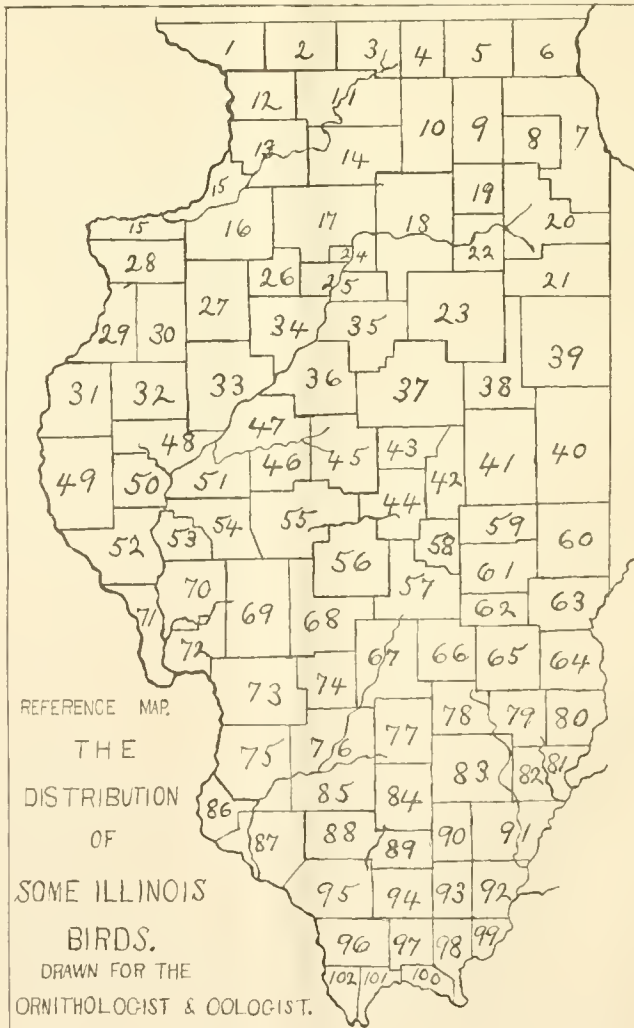
introduction to the readers of this magazine. Beside the above are others well worthy of mention would space permit.

W. E. Loucks.

Contributors living within the State have the Counties in which they reside annexed, and numbered to correspond with those on the map.

J. E. Dickinson, Winnebago Co., No. 3.
 F. A. Gregory, Winnebago Co., No. 3.
 W. E. Pratt, Lake Co., No. 6.
 Gordon Schanck, Lake Co., No. 6.
 O. H. Swazey, Lake Co., No. 6.
 George F. Morcom, Cook Co., No. 7.

George B. Holmes, Cook Co., No. 7.
 D. A. Young, Cook Co., No. 7.
 H. Gillingham, Cook Co., No. 7.
 L. W. Nichols, DeKalb Co., No. 10.
 Burton Brown, Whiteside Co., No. 13.
 Dr. A. C. Murchison, Henry Co., No. 16.
 A. Hamfeldt, LaSalle Co., No. 18.
 R. M. Barnes, Marshall Co., No. 25.
 R. M. Frisbey, Jr., Marshall Co., No. 25.
 Virginius Chase, Stark Co., No. 26.
 W. S. Strode, M.D., Fulton Co., No. 33.
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 Rev. J. C. Elliot, Perry Co., No. 88.
 G. W. Rearden, Gallatin Co., No. 92.
 Prof. L. E. Baird, Jackson Co., No. 95.
 O. Widmann, Old Orchard, Mo.
 Philo Smith, Jr., St. Louis, Mo.
 C. P. Fore, Wayland, Mo.
 C. J. Lemen, Uniontown, Ky.
 Burtis H. Wilson, Davenport, Iowa.

J. E. Dickinson. No. 3.

(R) Common.

Breeds—using an old crow or squirrel's nest.

Complete sets about April 1; one brood.

Sets, 5 to 7. 9 eggs average 1.58×1.37 .

Set 1-3, 1.61×1.29 ; 1.67×1.27 ; 1.63×1.28 .

Brood remains with old birds through the following winter.

Food, Meadow Mice, Moles, White-footed Mice.

Common names: "Cat Owl" and "Little Horned Owl."

F. A. Gregory. No. 3.

Not found.

W. E. Pratt. No. 6.

Two sets, one of 4 and one of 5, on April 12, 1890.

As he has found only these two sets in five years' collecting, we may conclude it is a rather rare resident in Cook and Lake Counties.

Gordon Schanck. No. 6.

Has no record of the Long-eared Owl.

O. H. Swazey. No. 6.

Has not met it.

L. W. Nichols. No. 10.

Tolerably common; resident along Fox River.

Set of 5 eggs.

Dr. A. C. Murchison. No. 16.

Resident, but more common in winter.

Tolerably common.

Nests—common in suitable places.

Uses an old crow's nest, preferably one in a pine tree, but sometimes in a hedge, "Osage Orange," or in the woods in an oak.

The condition of the nest is not material if it will hold the eggs.

Nests found on 3-11-89, 3-22-89, 2 nests: 3-25-89, 4-?-90, 4-10-92, 4-30-92, 2d set from same birds; 3d set was laid in 3 weeks after, 5-28-92, 6-20-92; 2d set from same birds.

Sets are: 1-8, 1-7, 1-7, 1-7, 1-7, 1-4, 1-5, 1-5, 1-5, 1-5, for the dates given above.

I am undecided as to whether the average set is 5 or 7. In 1889 I found sets of 7, but in 1892 all were of 5. The color, as in all owl eggs, is white, and except for dirt does not change during incubation.

A set of eight measures 1.62×1.25 , 1.64×1.28 , 1.63×1.30 , 1.58×1.34 , 1.61×1.28 , 1.62×1.28 , 1.60×1.29 , 1.56×1.29 ; average 1.61×1.29 .

Fifteen eggs taken in 1889 average 1.60×1.28 .

Fifteen eggs taken in 1892 average 1.68×1.29 .

From this I judge sets of 5 will average larger than sets of 7 or 8.

The largest two eggs are 1.73×1.38 and 1.75×1.31 ; the smallest 1.52×1.27 .

The period of incubation is about 4 weeks, but will vary, as some eggs in a nest will hatch in four weeks after the first was laid, while others will come at almost any time after 4 weeks.

An egg is laid every other day, or a set of 5 in 10 days. Incubation begins with the first egg laid.

Only one brood is raised unless they are disturbed, and then I have known one bird to lay 3 sets of 7 eggs in one nest.

R. M. Barnes. No. 25.

Summer resident, but date of arrival and departure unknown.

Nests sparingly; found only twice in 15 years' work, and heard of once.

One nest found in an old crow's nest in

a soft maple tree, in a small lagoon surrounded by plowed fields, about two hundred yards from river bottom proper. The other in a tall white pine tree in an old nursery.

One was only about 500 feet of a farmhouse. Height from ground, 45 to 55 feet.

Found on May 7.

Sets 5-5-5; not measured.

R. M. Frisbey. No. 25.

Resident, tolerably common.

Nests in suitable localities.

Nests found in a dense pine grove, near a farmhouse.

Old nests of Cooper's Hawk are used in this grove.

Average height from ground, 15 feet.

Nests found: March 9, 1-5, fresh to badly incubated.

March 20 (?), 1-7; incubation far advanced.

March 22, 1-5, far advanced.

March 24 (?), 1-4, far advanced.

Virginus Chase. No. 26.

Has not found it.

Dr. W. S. Strode. No. 33.

Resident, tolerably common.

Nests, commonly in thick, low timber, as pine, oak, saplings near a marsh or pond.

Uses a deserted Crow's nest.

Nests from last of March to middle of April.

Sets 1-5, 1-5, and 6 young, one egg, five young.

Measurements not given.

Has examined over 20 nests: thinks none were made by owls.

W. S. Cobleigh. No. 33.

Summer resident, not common.

Nests in Peoria and Fulton Counties.

Prefers a low, damp woods and dense forest.

Usually nests in an old Crow's nest, one near the trunk of the tree and not very high.

Nest the first of May or occasionally the last of April.

Relines an old Crow's nest and lays 4 or 5 eggs: average, 1.50 x 1.30.

B. F. Bolt. No. 34.

Rare resident.

One nest found.

W. E. Loucks. No. 34.

Rare resident.

Has record of 5 nests found by a friend.

D. S. Meixsell. No. 36.

Resident, tolerably common.

Nests in hollow trees; old Crow's and Hawk's nests.

Eggs found April 3. Young birds found on June 21: 4 and 5.

L. E. Baird. No. 95.

Resident, tolerably common.

One nest, in trunk of a decayed cottonwood tree, in dense forest, near creek; 2 young.

Says it is a bold robber of hen roosts. (From this I think it may be the Great Horned Owl.—A. C. M.)

Charles Wells. No. 45.

Finds it only in summer, common.

Nests sparingly.

Eggs taken from a roughly constructed nest, 3 feet from ground.

Measurements, 1.62 x 1.28.

C. B. Vandercock. No. 77.

Rare migratory species.

Five seen on January 22, 1890, in a dense thicket of scrub oak near a creek.

Has known of it in two other instances.

Rev. J. C. Elliott. No. 88.

Resident.

Found along creeks where the timber is heaviest.

Nesting habits not known.

G. W. Rearden. No. 92.

Finds it inhabiting creek bottoms.

Nesting habits unknown.

O. Widmann. Old Orchard, Mo.

Has met with it from November to April.

Has not found it in summer, but does not collect eggs.

Philo Smith, St. Louis, Mo.

Observations in No. 74.

Resident, fairly common.

Found in plum thickets or crab-apple trees.

Nests the last of March and early part of April.

Use an old Crow's nest from 12 to 30 feet from ground.

Average number of eggs, five, but six are not uncommon.

Has collected about 20 sets, some of them in Fulton County.

Eggs are same shape at both ends.

C. P. Fore, Clark County, Mo.

Resident, but not common.

Nest found May 4, 1889; an old Crow's nest in a dense scrub oak thicket, 12 feet from ground.

No addition except a few feathers from the breast of the owl.

Set 1-5; 1.65 x 1.25; incubation well advanced.

Burtis H. Wilson, Davenport, Iowa.

Resident, more abundant in winter than summer; 20 or more make their homes in the evergreens in a cemetery. Breeds sparingly in rather open, second growth, oak-timber.

Nests in deserted Crows' nests.

April 12, 1890, 5 eggs, slightly incubated.

Birds observed in Cook County by Robert Kennicott in 1853-55. (Trans. Ill. State Agric. Soc.), 1 Long-eared Owl. Common; known to nest in Cook County.

Catalogue of birds of Ill., Robert Ridgway.

Bulletin of the Ill. Museum of Nat. His., Vol. I.

Long-eared Owl, resident, breeds.

"O. & O.," Vol. 9. July and August, 1884.

Birds collected near St. Louis, Mo. No. 73.

Julius Hurter.

Long-eared Owl, transient.

Jan. 30, flock of 30 in one tree.

"Birds of Northeastern Ill.," E. W. Nelson.

Long-eared Owl. Not common, resident. Remains during the day in willow thickets and in similar situations.

"Birds of Carroll County, Indiana," B. W. Everman.

Long-eared Owl. Seemingly a rare winter visitor. I have specimens obtained January 29, 1884, February 5, 1886, January 14, 1888.

We have received reports on this bird from a strip of country running from north to south across the entire State, but the eastern half from Cook County down is entirely vacant except for the birds of Carroll County, Ind., which is across the line from Vermillion.

Again on the west a strip is vacant along the Mississippi River, wider in the middle of the State than at the north and south.

From the reports I get a variety of opinions, but conclude it is resident throughout the State except in the counties below the mouth of Illinois River, where it is a winter visitant and perhaps a rare resident, as only one observer has found it in any numbers, Philo Smith, in Bond County, who reports over 20 nests.

One reason this bird is not better known is that collectors do not know where to look for it. I think it can be found in almost any grove of pine trees, north of the southern third of the State, at some time of the year. I have often seen as many as a hundred in a grove of my father's, containing about 5,000 "scotch pines," perhaps 20 feet high. They would occupy several trees close together, but would sometimes be in several flocks, always returning in a short time to their roosting place when disturbed.

The food of this Owl consists of Mice so far as I can discover. I have examined very carefully the pellets found beneath their roosting places and have examined a nest containing young nearly every day while they remained in the nest, and neither in the pellets or nest did I find any traces of anything but Mice, two or three of which could always be found in the nest.

The mice were the common or house mouse, the white-breasted and the short-

tailed variety found in meadows. Dr. Strode informed me that he had in April, 1890, carefully examined a nest of this Owl containing five young, and no signs of any food but field mice, and the pellets around the root of the tree were composed of the fur of this mouse (*a. reпарius*). From this I am positive it does not make birds a part of its food, and from the fact that I have often seen it about young chickens and none were missing, I can say it does not molest them.

The voice of this Owl is somewhat like to the first "coo" of a dove, but has a distant sound. It is rarely heard.

When its nest is disturbed, however, it has a peculiar call, hard to describe, as it can hardly be called cat-like. It is very noisy when its nest is disturbed, and sometimes will, when it has young, return to the nest after being thrown from it.

The nest seems to be usually an old Crow's not always in very good condition nor in any particular locality, though generally in a pine tree or dense scrub, but I have found them in a hedge with no trees near. In this part of the country a Crow is not at all particular as to where it nests, as I have on several occasions taken the eggs from the nest when it was so low I could reach it from the ground and have found them as near a dwelling-house as 50 yards.

The number of eggs varies from 5 to 7, with 5 the usual number.

J. E. Dickinson reports 5 to 7.

Philo Smith says 5 is the average, but 6 is not uncommon.

Dr. Strode reports set of seven, as does Frisbey, of Sparland.

In 1889, I found only 1 set of 5, the rest were of 7 except the first set found, which was of 8, the largest set I have heard of so far.

In 1892, however, I found 5 eggs in all the nests I examined.

The eggs are laid every other day and incubation begins with the first egg laid, and in a set of 5 eggs covers a period of about 40 days from the laying of the first egg until all

are hatched, the first egg hatching in about 30 days.

The female sometimes remains on the nest for several weeks before the first egg is laid.

Dickinson says the young remain in company with their parents until the following spring.

Lewis Lindsey Dyche.

AN AMERICAN TAXIDERMIST AND HIS WORK.—A
HORNADAY OF THE WEST.

As a well known taxidermist seated himself in our office a short time since, on his return from a trip west, he said: "I have called on Dyche, and his work is simply wonderful. He's a good one." This was a confirmation of many reports of the same nature that have reached us from time to time. Mr. Dyche has for some time been connected with the Kansas University as curator, and through his personal efforts the university has a collection that ranks high, and of which they may well look upon with pride and satisfaction.

A portion of the collection is now on exhibition at the Columbian Exposition, and any of our readers who visit Chicago during the season should call on Mr Dyche at the Kansas building. Of the many flattering notices given by the press, the following, which appeared in the "Inter-Ocean," cannot fail to interest all:

KANSAS' GRAND SHOW.—PROFESSOR L. L. DYCHE,
OF THE STATE UNIVERSITY, AND THE
WORK OF HIS GENIUS.

Unloaded in front of the Kansas building on the Columbian Exposition grounds is one of the most remarkable exhibits that will be seen at the great fair. This is the natural history display made by the Kansas University. It will be no unusual occurrence during the next six months to have some writer for the newspapers say that the greatest exhibit to be seen has just been shipped from some point, but the above expression that

the Kansas University exhibit is "one of the most remarkable" is used advisedly.

This exhibit is the work of a man who is recognized by naturalists as being one of the best in the country, if not in the world, and his specialty is the larger mammals of North America. To this branch of the study of animated nature Professor Lewis Lindsay Dyche has given many years of his life and he is yet a young man. Beginning when a boy, tramping and hunting along the banks of the Waukarussa River, in Kansas, he went through the university with an increased desire to study the habits and natures of animals.

The exhibit which he has brought to the World's Fair is the result of ten years' work in the field collecting and fourteen months' work in the taxidermic shop with five assistants. The professor, who is curator of birds and mammals of the State University of Kansas, has devoted himself to making such an exhibit that the whole world will be compelled to acknowledge the superiority of the State of Kansas in this line.

Numbers in the abstract give but little idea of a thing. There is something in the sound of hundreds and thousands that gives but a vague impression to the mind, and it is only when the reality is placed directly before a person that he fully realizes what is meant by numbers. When it is said that the Kansas mammal exhibit will be 100 mounted animals it conveys no idea of what is to be seen there. A description of these hundred animals must of necessity be incomplete and far short of the picture that will be presented by a view that will be laid out on the floor of the north wing of the Kansas building.

The north wing of the Kansas building is 60 x 80 feet, with 19-foot walls. The light comes from a sloping roof of glass, while the front opens out into the main hall of the building. It is in this wing that will be placed one of the most artistic exhibits of the coming exposition. The professor is not satisfied with showing a lot of "stuffed"

animals, but has outlined a plan by which he will at the same time give an instructive and pleasing history of the animals in an object lesson. To describe in detail the plan it must be understood that these hundred animals are in groups, each group showing an actual scene taken from life by the professor, as he saw it while on one of his many hunting expeditions.

Beginning at the extreme southwest corner of the wing the visitor will find one of



BULL MOOSE.*

the grandest groups in the whole collection. This is a group of seven Moose. The herd is headed by an enormous Bull, who stands 9 feet 2 in. from the ground to the tip of his immense branching antlers. The leader of the herd stands on a slight eminence in a swamp and is looking off after some possible danger to his family. Near the Bull is an old Cow with twin Calves. The Cow is riding down a tree in order to give her Calves a chance to browse off the leaves. Back of the Cow are two 2-year-old Moose browsing from a tree, while a 3-year-old Bull is approaching from the opposite direction. The whole scene is set in a swamp true to nature, and made with logs and dead trees brought directly from the Lake of the Woods, where the animals were killed.

Separating the group of Moose from a group of Caribou is a natural break in the topography of the land. The four Caribous

*Sketches from specimens on exhibition.

are standing on a snow-covered piece of ground, the herd headed by a fine Bull.

On a little raise of ground off from the Caribou stands a herd of nine Deer. These are the Mule Deer of the Rockies, and the herd is headed by a magnificent Buck. This group is most artistically arranged, showing the animals in their natural positions as they are seen in the mountains.

ROCKY MOUNTAIN GOATS.

From the group of Mule Deer the ground rapidly rises until it goes to a craggy peak of mountains. On this is a group of the most remarkable animals of the North American continent. The Rocky Mountain Goat is here seen in his home. The peak is surmounted by an old shaggy "Billie," who stands guard on the top of the rocks while his family of six Ewes and younger Bucks are scattered in various positions over the crags. The scene is most life-like and gives a better idea of the habits of the mysterious animals than any work on natural history that has ever been written.

Between this high crag and another of sim-



GRIZZLY BEAR.

ilar nature to the south, is a valley through which runs a stream of water that finds an outlet in a sink-hole near the centre of the wing. Up this valley, or canon, two Bear, immense grizzlies, are seen as if ready to devour any who has sufficient temerity to ven-

ture into their domain. There is not much to a grizzly to make an exhibit out of, but these two Bears are such ferocious looking brutes that they attract attention at all times.

On the promontory of rock before spoken of, to east of the canon where the Bears find their home, is a group of Rocky Mountain Sheep. These are the famous big horn which the early travelers of the West wrote so much about. This group of ten animals represents one of the finest collections in the whole world. The band is headed by an old ram that is a veritable monster in size and is perfect in color and shape. This leader stands



ROCKY MOUNTAIN SHEEP — RAM.

in plain view on the topmost crag and overlooks space, ever on guard against danger. Below him, in various attitudes, are to be seen the others of the band, and they are found depicting the true positions of the animals as they were seen by the professor in the Cascade Mountains, where he brought down numbers of them.

Under the ledge of rocks at the bottom of the craggy mountain on which are the Sheep is a mountain Lioness and her three very young Cubs. The little animals, which are no larger than half-grown kittens, are playing about their mother while the old one looks as contented as an old Cat that has been fed on a good pan of milk.

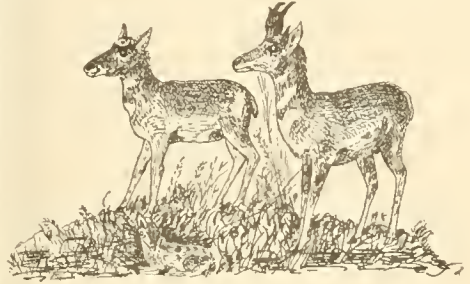
Just below the Lioness and her young is

seen a group of Virginia Deer, five in number, which are feeding on the slope of the mountain. This group, like all others of the Deer kind, is headed by a lordly Buck, which seems to feel his superiority over all other animals.

Coming around on the eastern end of the wing the visitor finds himself in front of one of the finest groups of animals in the whole collection, from an artistic point of view.

This is a group of six Elk. The group is headed by a Bull that is said to be the finest

The last group along the wall is on the extreme southeast and is one that never fails to attract attention. It is a group of Buffalo, or the American Bison. An immense Bull, the largest ever mounted, not excepting the famous Bull in the American Museum and



ANTELOPE AND YOUNG.



ELK, OR WAPITI BULL.

ever taken from the mountains for the purpose of mounting. He stands ten feet and nine inches from the point of his toe to the tip of his antlers, and is not only the monarch of the Rockies, but a veritable World's Fair King. He leads a band that presents a picture of still life most wonderfully conceived and executed.

Here the ground slopes off toward a bit of prairie land, and a group of Antelope, six in all, stand and lie in a spot, showing the peculiar characteristics of this most beautiful of the Deer kind.

Crouched in the bunch grass near the Antelope are two Jack Rabbits, one squatting close to the ground, the other erect and alert, watching for its natural enemies.

that other in the National Museum, is the leader of this herd of five, and right royally does he carry off the palm of being the finest specimen ever shown anywhere in the world.

The group is one of the most natural of the entire exhibit.

The visitor has now gone from the swamp land of the Minnesota around by the mountains of British Columbia and Colorado to the prairie land of Western Kansas and Texas, and as he turns from the walls which he has been following he sees the prairie spreading out toward the centre of the wing. Here he first sees a trio of immense Buffalo Wolves tearing at the decaying carcass of a Buffalo.

The Wolves are true to life and are gnawing at the carcass of a Buffalo that was found in the famous Pan Handle of Texas. This group is one of the interesting bits and for scientific accuracy is hard to beat. The expression on the faces of the Wolves is such that it brings a shudder to the observer, who fully realizes that the terrible tales told of the ravages of these savage animals have never been overdrawn. Sitting and standing near the snarling Wolves is a group of Coyotes, eight of the little Wolves being congregated in a bunch. This group is enlivened by a spirited contest between three young Coyotes who are struggling over the carcass of a Jack

Rabbit. One triumphantly runs off with the tail while the other two tear the body apart.

Just in front of the band of Coyotes is a group of Wolverines, those "Indian devils" that are the bane of the trappers of the West. These animals are the most vicious brutes in the whole collection.

Directly in the front of the display are two immense Mountain Lions quarreling over the carcass of a Deer that has fallen prey to one of them. The other animal is approaching, with mouth open and ears flat, looking all the world like an immense Cat. The scene is one of the most realistic, and calls for many exclamations from the visitors.

Just back, to the south of the fighting Lions, is a Lioness and her two half-grown Cubs. This group simply shows a part of the family life of the animal. North of the Lioness and her Cubs is a group of seven Foxes, of all the varieties, one of them being a Silver Fox, the skin alone of which is valued at \$150.

Near the Fox group are two Ocelots, those beautiful spotted Cats of the southern border, and near them are to be seen a group of Lynxes, arranged in positions that show various phases in the life of that animal.

This sketch does not go into the detail of the work that has been expended to prepare this one of the most artistic and scientific exhibits on the ground. A day would be well spent here in the study of the animals and their habits. There is a group which is not in this exhibit, but which will attract more attention than any other group in the building. It is a pair of fighting Bull Moose. These immense animals are struggling hard for supremacy, and the details of the work done on the group makes it a masterpiece. This group is so large that it could not be placed in the wing with the other animals, for it would hide too much of the exhibit; so it is placed separate and stands out in the main building, where it can be viewed from all sides.

In the Great Dismal Swamp.

What ornithologist is there in this country who has not wondered to himself if there did not somewhere in the jungles of this vast peat bog still lurk that prince of Woodpeckers, the Ivory-bill?

It had long been my desire to make an expedition into this lonely region and learn for myself if there were not still to be found in the vast wooded tracts specimens of the imperial *principalis*.

So while collecting in the eastern part of the State last summer, I made it convenient to stop for a couple of weeks near the Dismal Swamp. From Sunbury, Gates County, as a radiating point, I visited several of the neighboring swamps, but found no signs of the object of my search. On the morning of the last day in May, arrangements having been made, we were off for the big swamp. The Dismal Swamp! What intelligent person does not think with interest of these words, of which the poet Moore spoke in his "Lake of the Dismal Swamp." Of those wild morasses of which Harriet Beecher Stowe wrote in her wonderful "Tale of the Dismal Swamp," and whose very name implies that, of all other swamps, this one is the most lonely and desolate. Our course for six miles lay along a sandy road through the pine woods before the canal was reached, which runs eastward twelve miles into the very heart of the swamp. Arriving at the canal, our guns and provisions were at once transferred from the cart in which we had come, to our boat, which lay tied up under the bank. A few strokes of the paddle and we had left the pines and were passing under the overhanging bough of the oak and bay, whose limbs, spanning the twenty-foot stream, formed a complete arch overhead. In the semi-darkness of this almost subterranean canal we pushed on.

In the prow of the boat sat Caston, with his rifle across his knees, ready to bring down the bear which he verily believed he should see before the first half mile should have been

covered. On the centre seat was Cross, who, with his paddle, was aiding me to propel the boat. The oak and bay soon gave way to tall forests of juniper, cypress and gum.

After passing for several hours through this primitive forest, we came suddenly upon a logging camp.

Extending far back into the shades of the forest were corduroy roads, over which juniper logs, cut into five foot blocks, are drawn by mules and afterwards rafted down to Norfolk. Near the wharf lay two boats just loaded, each with its man at the prow ready to convey these sixty-five foot crafts to their destination, which feat they accomplished by pushing on either bank with their long poles. This industry has been kept up ever since the revolutionary war. Washington at one time owned a large part of the swamp, and had some of the canals dug which are in use now.

Frequent unsuccessful attempts were made to penetrate the wilderness around us, but the ground was everywhere so soft that, after getting off the slight bank of the canal, we invariably sank up to our knees in the peat. Even in the firmer places the ground could be shaken for a radius of eight or ten feet by simply springing the foot.

As we advanced still farther into the swamp small birds became more plentiful, although at no point was bird life abundant.

Warblers and Thrushes flitted across the way in advance only to plunge into the opposite thicket. Turtles tumbled off their favorite logs, and, rarely, a water snake glided away on our near approach. Long stretches of reeds from ten to fifteen feet in height now came into view, and by climbing a juniper tree the eye swept away for miles over a vast expanse of reeds, broken only here and there by an isolated juniper or cypress. These reeds grew very thick, and it seemed to us almost impossible for any animal to force a passage through them. Yet it is said that only a few years ago a man succeeded in passing clear through the swamp on foot, accompanied by his dog. We camped at night

upon some slightly elevated knoll, drawing the boat well up on shore and sleeping on the ground.

Thus wrapped in our blankets, we lay listening to the dreamy murmur of the mosquito and the clamorous love-cry of the ever present bull-frog; while ever and anon borne upon the night breeze came the distant hooting of the Barred Owl. A little after noon on the second day off, being now in the last of a series of three canals, through the opening ahead we discovered Lake Drummon, and half an hour later our little boat was tossing about on the waves while we were endeavoring to make fast to a cypress tree. Lake Drummon, situated as it is in the very heart of the swamp, has no sandy margin, but the waves, hurled by the wind, which here has a clear sweep of seven miles across the water, wash in among the cypress trunks far back into the interior. The lake as well as all the water in the swamp is dark red in color, being turned so by coming in contact with the roots of the juniper.

While the others ate their dinner I took a plunge beneath the dusky waves and found the water to be about eight feet deep at the spot where we were. The swimming was excellent. Two hours later we had left the "Dusky Lake" and were passing down one of those canals which forms its outlet. The water in this stream has about a two mile current. Once again we landed, and this time found the ground firm enough to bear our weight. Back into the forest we pressed for several hundred yards, the limbs of the giant trees completely shut out the sunlight.

Through this forest, whose shades were as dark, and whose ground was as treacherous as ever Livingston roamed over, here in the semi-darkness of the gloomy swamp, imprinted deep in the damp, black, earth were found tracks of Coon and Wildcat. Not even an insect broke the melancholy silence of this weird forest.

The catacombs of Rome or the sepulchres of Egypt could not be more death like or

silent. Not a blade of grass underfoot, nothing but fallen and decaying trunks and limbs of trees.

But alas the *Capephilus principalis* was never found, and my collection is still without a specimen of the Ivory-bill. With the exception of one green Heron, not a single aquatic bird was seen in the swamp. The reason for this I suppose to be from the fact that the water is everywhere deep, thus affording no good place for waders to feed. Two or three droves of Brown-headed Nuthatch were noted on the pine bluffs and once a Carrion Crow wheeled into view.

While a trip through the Dismal Swamp is well worth the trouble, yet as a point for collecting birds, other localities may be found which are both more desirable and profitable.

T. Gilbert Pearson.

Guilford College, N.C.

The Acadian Owl in Philadelphia County, Pa.

On November 5, 1892, while walking along the edge of the woods which extend almost the entire length of the Wissahickon Creek, I came to a stream of water, the hills on either side of which formed a small valley. The bushes along the stream being very thick, made the place very dark. As I approached the edge of the bushes, I almost trod upon a small Owl, which flew into the thicket. After searching around for the bird a short time, I disturbed it again. This time it flew into the woods, and after another search of fifteen or twenty minutes, I succeeded in finding it, perched on a limb of a tree about four feet from the ground.

I thought I could capture it alive by getting back of the tree while my friend, H. R. Stetler, Jr., stood about fifteen feet in front to attract its attention. The owl could see a little better than I thought it could and as I did not want it to escape, the only thing to do was to shoot it.

This is the first Saw-whet Owl I have ever taken in Philadelphia County, Pa., although

there may be quite a number about, but on account of their habit of sleeping in hollow trees and dark dreary places during the day, they are seldom come across.

M. L. C. Wilde.

Camden, N. J.

Are Spotted Eggs of the Native Goldfinches Common?

Coues, in his "Key," speaking of the eggs of the American Goldfinch, says: "Normally unmarked." I had heard of no spotted eggs being taken, until April 18, 1891, when I took a set of three of the Arkansas Goldfinch, one of which was faintly marked with cinnamon around the larger end. May 3, 1892, I took another set of three, one of which has faint but numerous dots on the larger end and others scattered irregularly over the balance of the egg. The nest containing these eggs was placed about four feet from the ground in a sage bush and was substantially built, being composed of bits of sage stems and finely split grass neatly woven together and placed in an upright crotch of four prongs.

April 27, 1891, I discovered a new nest of the Arkansas Goldfinch placed on top of an old one in a sunflower bush. The top nest contained three eggs. May 23 I took one egg from a new nest of this species and seven days later I took seven more from the same nest.

This bird nests abundantly among the low foot hills, building its nests in poison oak, sunflower or other bushes, which grow in abundance along the canons wherever there is enough water to keep them alive.

I would be pleased to hear through the "O. & O." from other collectors regarding spotted eggs of the Goldfinch.

Harvey M. Hall.

Riverside, Cal.

[I never saw any.—J.P.N.]

Any of our readers who are interested in a musical publication will do well to read our club rate with the "New York Musical Echo."

Eggs of Warblers in Collection of Thomas H. Jackson,

DECEMBER 1, 1892.

A. O. U. Nos.	Ridgway Nos.	Names.	No. of Sets.	Total No. Eggs.
636	74	Black and White Warbler, 1-4, 1-5 . . .	2	9
637	75	Prothonotary Warbler, 2-4, 6-5, 4-6, 1-8 . . .	13	70
638	76	Swainson's Warbler, 1-3, 1-4 . . .	2	7
639	77	Worm-eating Warbler, 6-4, 12-5, 2-6 . . .	20	96
641	79	Blue-winged Warbler, 1-4, 1-5 . . .	2	9
642	81	Golden-winged Warbler, 2-4, 4-5 . . .	6	28
645	85	Nashville Warbler, 1-4, 1-5 . . .	2	9
646 α	86 α	Lutescent Warbler, 1-4, 1-5 . . .	2	9
648	88	Parula Warbler, 1-4, 4-5, 1-6 . . .	6	30
652	93	Yellow Warbler, 2-4, 3-5 . . .	5	23
655	95	Yellow-rump Warbler, 2-4 . . .	2	8
656	96	Audubon's Warbler, 1-3, 1-4 . . .	2	7
657	97	Magnolia Warbler, 4-4, 1-5 . . .	5	21
659	99	Chestnut-sided Warbler, 2-4, 1-5 . . .	3	13
661	101	Black-poll Warbler, 1-5 . . .	1	5
663	103	Yellow-throated Warbler, 1-4 . . .	1	4
666	106	Golden-cheeked Warbler, 1-4 . . .	1	4
667	107	Black-throated Green Warbler, 2-4 . . .	2	8
671	111	Pine Warbler, 1-4 . . .	1	4
673	114	Prairie Warbler, 2-4, . . .	2	8
674	115	Golden-crowned Thrush, 4-4, 6-5 . . .	10	46
675	116	Small-billed Water Thrush, 1-4 . . .	1	4
676	117	Large-billed Water Thrush, 1-4, 1-5 . . .	2	9
677	119	Kentucky Warbler, 1-4, 1-5 . . .	2	9
681	122	Maryland Yellow-throat, 4-4, 1-5 . . .	5	21
681 α	122 α	Western Yellow-throat, 1-5 . . .	1	5
683	123	Yellow-breasted Chat, 6-4, 2-5 . . .	8	34
683 α	123 α	Long-tailed Chat, 2-5 . . .	2	10
684	124	Hooded Warbler, 1-4, 1-5 . . .	2	9
685	125	Wilson's Warbler, 1-4 . . .	1	4
685 α	125 α	Pileolated Warbler, 1-4 . . .	1	4
686	127	Canadian Warbler, 1-4 . . .	1	4
687	128	American Redstart, 1-3, 4-4 . . .	5	19
			121	550

THE
ORNITHOLOGIST AND OÖLOGIST

A MONTHLY MAGAZINE OF

NATURAL HISTORY,

ESPECIALLY DEVOTED TO THE STUDY OF

BIRDS,

THEIR NESTS AND EGGS,

AND TO THE

INTERESTS OF NATURALISTS.

Under the Editorial Management of

FRANK B. WEBSTER, ... Hyde Park, Mass.
J. PARKER NORRIS, ... Philadelphia, Pa.

PUBLISHED AT THE

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OF THE

FRANK BLAKE WEBSTER COMPANY,
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HYDE PARK, MASS.

The O. & O. is mailed each issue to every paid subscriber.
If you fail to receive it, notify us.

Overofficious — or ?

It appears that in the eastern part of Maine there is a game warden who during the past season has been trying in his official capacity to interfere with the legitimate business of a taxidermist—and it is intimated in the interests of another taxidermist. Now the taxidermist business is demanded by and to a large extent supported by sportsmen. The game warden is the servant of the sportsman, and his business is to look to the protection of game, not to monkey with taxidermists. We have on previous occasions seen the antics of some very "cheap fellows" and they have been sat down upon. It is a settled fact that sportsmen do not countenance nonsense; and if the case we refer to is such, it will receive proper attention from the fraternity if a protest is made.

Cyclone Traps, the best and latest, just the thing for those who are collecting small mammals. Sent by mail, post paid, 2 for 25 cents, or 1 dozen for \$1.25.

On January 26 a large flock of Snow Buntings were seen by R. H. Carr at Brockton, Mass.

Brief Notes, Correspondence, and
Clippings.

The largest Tarpon reported in season of 1892 at Fort Myers, Florida, was taken May 3, by Col. B. H. Young. It measured 7 feet and weighed 184 pounds. The smallest by William Ellison, March 13, length 4 feet 5 inches, weight 58 pounds.

John Wallace, the well-known taxidermist of New York city, died January 17. Mr. Wallace was a pioneer in the ranks.

We are having so many letters from our correspondents describing the Pine Grosbeaks, and asking what they are, that we have not space to publish them. At this season we advise you all to refer to your Coues key, and study up the bird.

E. J. Brown reports that the Great Northern Shrike has been common at Washington during the winter.

On December 25, 1890, a House Wren's nest containing three fresh eggs was found by a neighbor. Further proceedings was stopped on the day by a Cat.

J. T. Park.

Warner, Tenn.

I noted two American Robins on January 19. They were in an elm tree.

R. H. Howe, Jr.

Longwood, Mass.

G. S. Miller, Jr., is overrun with mice. There are over 2000 on his premises.

In October I found Newell mounting a Swainson's Hawk killed here. Something new for so far east. I bought it of the owner. It is in nice plumage. Newell's shop is full of Deer, Caribou and Moose. Hope that he may do well. *G. A. B.*

Calais, Maine.

Those who intend visiting Florida, should read the advertisement of F. L. Small, who has for a long time been a contributor to the "O. & O." If there is any gunning in his locality, he will be the man to know it.

It reflects very little credit to a taxidermist to take every opportunity to run down the work of his neighbors. We have before us a letter that certainly shows about as unkind a disposition as can be imagined.

We can assure the aggrieved party who sent it to us that such documents only injure those who write them. We would care nothing about it.

C. M. Jones, Eastford, Conn., writes that birds have been very scarce in his locality this winter. He has observed a few Grosbeak and one Goshawk. He asks if many northern birds have been reported.

Captain Farrar, editor and manager of the "Sportsman and Tourist," died January 8, at Jamaica Plain, Mass., after a brief illness. We are unable to announce whether the publication will be continued.

We have heard of only a very few Snowy Owls. Pine Grosbeaks have been unusually plenty. Snow Buntings common as usual. Early in the season Barred Owls were reported. The weather has been so severe in the east that there has been but little shooting. Ducks have been very scarce in the Boston market.

On December 31, a neighbor shot a Meadow Lark just north of the town. We have very few birds here this winter. Rabbits and Minks have been more common than usual.

About the middle of December a Screech Owl came down the fire-place of Lewis Palmer. He kept it in a cage, but it soon died.

Harry Gillingham.

Oak Park, Ill.

Roping Elk in the Rockies and the Wild Hog in Louisiana, in February "Outing," catches the attention of naturalists and sportsmen.

Which is the swiftest flyer among our birds? Who can answer? This question was asked in a previous issue, and the writer received no reply.

We have received satisfactory returns from our ad. in your paper, and would be willing at any time to testify to the merits of your columns as an advertising medium.

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And any reader who has subscribed for the publication, will find it a first-class one.

I secured a Red Screech Owl ♀, taken in the act of killing a full-grown Hen in its coop, at Sudbury, Mass., January 16.

A. W. Morse.

Winter Residents of Milton, Wisconsin.

1. Downy Woodpecker.
2. Hairy Woodpecker.
3. Great Northern Shrike.
4. Blue Jay.
5. Black-capped Chickadee.
6. White-breasted Nuthatch.
7. Mourning Dove.
8. American Crow.
9. Snowflake.
10. American Robin.
11. Slate-colored Junco.
12. Swamp Sparrow.
13. Golden-crowned Kinglet.
14. American Goldfinch.
15. English Sparrow.
16. Little Screech Owl.

Floyd Coon.

A World's Fair Suggestion.

Are we going to the World's Fair at Chicago? If so can we not have a headquarter in that city where we may meet? Let some of the Chicago readers of the "O. & O." suggest a place where we may leave our card stating our arrival and departure and where we may be found while in the city. No doubt there are many readers of this journal who are going to the fair and while there would be pleased to meet some of their bird friends.

Let us hear from some one else.

Albert Lane.

Madison, Minnesota.

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HYDE PARK, MASS., MARCH, 1893.

No. 3.

Distribution of Cooper's Hawk in Illinois.

J. E. Dickinson. No. 31.

Summer resident; common.

Arrives first week in April, leaves middle of October. One specimen, December 11, 1891, and one January 13, 1893.

Nests, usually in groves of black scrub oak, sometimes in the edge of the larger timber; but always in a black scrub oak, usually placed near the trunk, 20 to 40 feet high.

Nest composed of dead limbs and twigs, lined with smaller twigs and rootlets. An old Crows' nest is rarely used when the first nest has been destroyed.

Complete sets—first week in May (earliest May 3), and always consists of 3 eggs. Color of eggs, light blue, sometimes marked with red.

Average size, 1.98 x 1.50; largest, 2.05 x 1.54; smallest, 1.92 x 1.45—average from 12 specimens. A second and third attempt will be made to nest if the previous sets are destroyed, the second set being complete about the middle of the month, and the third the last of the month (earliest third set is May 24).

Common names, "Chicken Hawk" or "Pigeon Hawk."

Food, young poultry and birds; not much of a mouser.

F. A. Gregory. No. 3.

Summer resident; tolerably common.

Nests in May (May 24, 1890, 1-3) in

black oak. Sometimes uses old Crows' nest; 3 eggs, light bluish.

W. E. Pratt. Nos. 6, 7.

Nests; common.

Nests found (April 27, 1-2; May 1, 1-4; May 2, 1-2) in old nest of Red-tail Hawk, (May 15, 1-3, 1-5; May 21, 1-5).

O. H. Swazey. No. 6.

Resident; tolerably common.

Nests commonly in the timber, but is not particular as to the density or its remoteness from houses.

Nest built in a crotch of a tree, usually the black oak—average 40 feet from the ground—of stick lined with grape and other bark.

Eggs laid in May, 2 to 4 in number.

Whitish, sparingly blotched with drab.

Gordon Schanck. No. 6.

Summer resident; occasional resident.

Arrival, February 15 to March 15; departure, October to December.

Very common.

Nests commonly on either high or low ground near edge of woods or clearing.

Nests in any kind of high timber from 20 to 50 feet, composed of sticks and roots, lined with grass, bark, and cornstalks.

Date from April 15 to May 30.

Number of eggs usually 4, sometimes 2.

Incubation, 3 to 4 weeks.

Usually greenish white, very seldom marked; only 3 in 13 were marked a very faint reddish brown; but when incubated a dull white. Measure, largest, 2.08 x 1.60; smallest, 1.85 x 1.45; average, 1.90 x 1.52.

But one brood in a season.

A. C. Murchison. No. 16.

Resident; tolerably common, but more so in spring and fall.

Nests common in suitable localities.

Nests found on April 20, May 6, 14, 20. (No records back of those now in my collection.)

Usually in the edge of a dense timber and in a black oak crotch about 20 feet from the ground. A bulky affair of twigs loosely piled together, lined with a few pieces of bark from 18 inches to 2 feet across top, 12 inches deep.

April 20, 1-2; old Squirrel's nest with a lot of sticks added, in a black oak 20 feet up. Eggs, 1.95 x 1.58, 1.97 x 1.57.

Fresh (set not complete).

May 6, 1-4, fresh. Measure, 1.92 x 1.52, 1.93 x 1.51, 1.90 x 1.55, 1.94 x 1.54. Average of set, 1.95 x 1.53.

Nest of fine but long twigs of the larch, lined with the bark of the Scotch pine, placed in a larch tree 15 feet from the ground, in the edge of a dense grove of pine and larch, near a house.

Nest 2 feet in diameter, 15 inches deep.

May 14, 1892, 1-5 (incubation begun in some of the eggs); measure, 2.07 x 1.56; 2.10 x 1.57; 2.06 x 1.53; 2.10 x 1.57; 2.15 x 1.57; average, 2.09 x 1.56.

Nest an old Crows' nest, placed by the writer in a pine tree for a pair of Owls about 20 feet from where the set of 1-4 was taken in 1891. The Hawks were the same pair as in 1891, for they were in the grove all winter. A quantity of twigs were added to the nest by the Hawks.

May 20, 1-2; slight, 1.96 x 1.55, 1.96 x 1.57. Eggs placed in a deserted Crows' nest in a small black oak in a dense timber.

Average of 13 eggs, 4 sets, 1.99 x 1.55; largest, 2.15 x 1.57; smallest, 1.90 x 1.55. Both sets of 1-2 are a bluish white, unspotted; 1-4 has a number of large, reddish blotches (blood?) scattered over the entire surface of eggs; 1-5, by same bird, has at

the large ends dark blotches, with a tinge reddish. These are certainly shell marks. The color becomes duller after incubation has begun.

R. M. Barnes. No. 25.

Resident. (Jan. 7, 1893, one specimen; mercury, 7° F.)

Fairly common. Breeds rather sparingly. Nests occasionally in second growth of hard wood on the bluffs, but usually in small but tall willows in the dense swamps of the Illinois river bottoms.

Nest placed in oak, willow, cotton-wood, and soft maple trees, willow preferred, 25 to 50 feet up; made of sticks, lined with bark; 18 inches across, 12 thick, slightly hollowed.

Nests from April 30 to June 7.

Set 4 and 5 eggs only.

R. M. Frisbey. No. 25.

Resident; tolerably common.

Nests from April 1 to May 30 (April 9, May 24). Usually in an oak tree, near top, in the crotch. Pick a retired spot in dense woods.

Nest of sticks, etc., lined with bark; sometimes used several times, even after one set has been taken.

Eggs, 3 to 5.

Has found the nests common in a pine grove.

Virginius Chase. No. 26.

Summer resident; tolerably common.

Nests in April, in oak and bol-elder trees near streams, 20 to 35 feet high—very flimsy affairs. Eggs can be seen from below.

Sets of 1-2.

Dr. W. S. Strobe. No. 33.

Resident, but more common in summer than in winter.

Follows the birds south in their migrations.

In October, 1890, observed flock of over 100, and a few days later a flock of about 50, flying south, high in the air.

More common now in winter than formerly, as Quail are more common.

Nest has the appearance of an old Crows' nest reconstructed.

Eggs, 3 or 4, sometimes 5.

Color, bluish white, usually without markings, but sometimes a set or egg would be handsomely marked with lines and spots of drab and red.

W. S. Cobleigh. No. 33, 34.

Summer resident. Arrive middle of March. Tolerably common.

Nests in tall timber, composed of small sticks, lined with pieces of bark, placed in tall wild cherry or other tall, straight trees about 40 feet from the ground. Nest about 2 feet in diameter. Nests about the middle of May.

Eggs, 3 to 5, usually 3.

Color, pale bluish white, sometimes spotted with reddish brown.

Set of 3 measure 2.00 x 1.50, 2.00 x 1.60, 2.05 x 1.55.

B. F. Bolt. No. 34.

Resident, not wholly. Arrives from south about April 10. Tolerably common. Nests commonly.

Nests on high grounds or where there is plenty of oak.

Generally an old Crows' nest is fitted up in an oak from 15 to 40 feet from ground. Laying begins about May 10 but often earlier.

Set generally 4, but 2, 3 and 5 are found, 5 rarely.

Color, light blue or dull blue, usually spotted with reddish brown.

(Continued.)

This has been a cold dreary winter for the birds. A flock of 300 Crows are wintering in Highland Park, roosting in the evergreens and picking up what they can get to eat. The Ducks are very common at the foot of the main streets now, where the ice is open, and here they can be seen at any time. A Robin was reported February 17, and the Horned Larks, Juncos, etc., are here. A Red-shouldered Hawk and Screech Owl have remained all winter in a large yard in the north end of the city, and the Hawk is very tame and easily approached. A rusty Blackbird was shot November 19, which is very late for them. *B. H. Swales.*

Detroit, Mich.

Some Holiday Trips.

[Read before the Linnaean Society of New York, April 20, 1892.]

A business man who tries to study birds usually has a hard time of it, especially if he aspires to something more than "closet ornithology." He labors under the disadvantage of being unable to choose the days for his collecting trips; for outside of his vacation, usually of short duration, he has very little time during the year to call his own except the seven or eight holidays. So he finds himself, after a while, measuring time by holidays, and no sooner has one passed than he begins to look forward to the next, and devise some fresh scheme or seek a new field of operation; and it affords, I assure you, a very pleasant diversion from business cares to look up a time-table or write a letter to one's friend in the country, telling him when we are coming, and planning out all the details of the trip.

Dependent thus on certain fixed days, it often happens that the weather is too wet or too dry, too hot or too cold, although I believe with Dr. Coues that "all times are good times to go a-shooting." As examples, New Year's Day and the Fourth of July are proverbially rainy, which makes it unpleasant for the collector, although he is just as likely to get a good bag as on a dry day, and a little more so, I think.

Another drawback to collecting in the near vicinity of the cities is the ever-present "would-be" sportsman, more properly "pot-hunter," who turns out in such amazing numbers on a holiday when the weather is good as to very nearly monopolize what little game he doesn't scare out of reach.

But such is the fascination that the study of nature has for its followers that, in spite of all obstacles, every holiday finds the student in the field, eager for fresh knowledge and new specimens; and no matter how little success he may have or how discouraged he may get, I doubt not that, if he be a *true naturalist*, he will be ready to start

again the next morning, after a good night's rest.

May 30 has always been a red letter day with me, and while I don't think that I am lacking in patriotism, still I celebrate the day in a somewhat different way from the mass of my fellow citizens.

Lake Grove, a little hamlet situated in the geographical centre of Long Island, is my birthplace, and quite naturally my steps often tend in that direction on Decoration Day; so what little scientific matter there may be in this paper will relate to the bird life in that locality at the season mentioned.

As this is the only holiday during the spring months, we turn our attention more especially to the breeding habits of our birds, and while we have had no great success in obtaining eggs, still we have some interesting notes and have come to the conclusion that this would be a very fruitful field to work earlier in the season.

One of the most interesting birds of this section of Long Island is the Pine Warbler, *Dendroica vigorsii*, who is quite common in the large tracts of pitch pine which cover the more sandy parts of the island. He is a very hardy bird, arriving during the first days of April and remaining till October, but he does not attract much attention, his song being faint, his colors plain, and his actions rather slow. The song much resembles that of the Chipping Sparrow, but is more "liquid and *crescendo*," as my notebook has it.

It was about 5 o'clock on the morning of May 30, 1889, that we sallied forth from the house and made our way to the pines.

None but those who have been cooped up in a dusty city for months can understand fully the bliss there is in breathing the delightfully free air of a balmy spring morning. We had no sooner entered the woods than we were greeted by the Pine Warbler's song, which we had not heard for over a year; it seemed to breathe of the sough of the pines

and the quiet therein, and is one of the most restful of songs. During the three days that I stayed in the vicinity I spent considerable time listening to these birds, watching their movements and searching for nests; but while I learned something of their habits, I failed to discover any indications of breeding, except on the last day, when I saw a female feeding a *well grown young* one. Well, I just stood in open-mouthed astonishment at this, for although I knew the birds arrived early, I had no thought of their being able to build a nest, incubate their eggs, and rear a brood of young before most of our small birds have laid their eggs. I was forced to conclude, however, that my eyes were not deceiving me and that the time to look for nests was in April or the very first of May. I think that, in consequence of the presence of the young birds, the species must be more common at this date than at any other time of the year.

The birds stay well up in the trees, and while they do not seem to pay the slightest attention to any one who is below, still they have a habit of flying from the tree just at the moment one doesn't want them to, oftentimes taking extended flights and again only to the next tree. They cannot, however, be called a restless bird, for if the observer will lie perfectly quiet they will often feed in the same tree for five minutes or more.

We found our first Hummingbird's nest on this trip; it was saddled on a pine limb about twelve feet above the ground. The birds made no demonstration whatever at our plundering of their beautiful little home.

Having found a Sharp-shinned Hawks' nest in this vicinity the previous year, I was keeping my "weather eye" open for another one, and while doing so I noticed an old Squirrel's nest, well flattened out, situated in a pine about 25 feet from the ground. Sticking out of the nest was a pair of ears

which at first sight I took to be those of a Squirrel, but this idea was soon dispelled when an Owl's head appeared over the edge of the nest, and the bird on seeing me took wing and sailed away. Somehow "*Barred Owl*" had been running in my mind all day and I was now seized with the impression that I had found a Barred Owl's nest, but it turned out to be a Long-eared (*Asio wilsonianus*) instead. However, the species was of small importance to me at that moment for I had an Owl's nest anyway, and it was my first; so, as may be imagined, I ascended the tree with all possible speed and gazed upon the three downy white Owlets which were all of a different size. This was something of a disappointment, for I was expecting eggs; but I descended and notified my companion of the find; he had the gun, and at once turned his attention to securing the old birds, which had both come near me while I was up the tree, and had kept up a distressed moaning. He soon shot the male, and the female, though rather shy after this, came back several times, but we failed to get her. After some discussion involving the humanity of the act, we decided to take the young birds for the cause of science; they are now in Mr. William Dutcher's collection.

Arthur H. Howell.

(Continued.)

Nesting of the Duck Hawk on Mt. Sugar Loaf, Mass.

Among some of the sets of eggs taken in Massachusetts that can be called rare or valuable to the ornithologist are those of the Duck Hawk (*Falco peregrinus anatum*). There are probably only six places in all New England where this bird can be found breeding, namely, Talcott Mountain, Conn., Mount Holyoke, Mount Tom, and Sugar Loaf Mountain, Mass., Brandon, Vt. and Mount Katahdin, Maine. In the three localities in Massachusetts there is but one pair of the Hawks at a place the same season,

and as the bird always chooses an almost inaccessible site in some lofty cliff for its eyrie, it is very seldom that the eggs are found by collectors. During the past summer I had the pleasure of finding the eyrie of one of these Duck Hawks on the side of Sugar Loaf Mountain and I have written the account of the same for the benefit of the readers of the "O. & O."

The Duck Hawks arrive from the south about the last week in March. They come in pairs, and the first to arrive at once choose a nesting place; then they guard the whole side of the mountain for several weeks before the eggs are deposited, and, so far as I know at present, only one pair occupy a cliff the same season, and they usually choose an almost inaccessible cliff.

On the 8th of April, 1892, I went to Sugar Loaf Mountain and there saw the male and female Duck Hawks. They would fly from one part of the mountain to the other, and always, as they launched out in the air high above the tops of the trees some two hundred and fifty feet below them, they would utter their peculiar screams. Whenever I would keep out of sight for any length of time and then reappear at the edge of the cliff, one of the birds would always be at rest on some rough crag of the rocks, or on a dead stump that projected from the ledge far below.

I found that they returned near the same place every time, and so came to the conclusion that the nesting place must be somewhere in that vicinity; but after long and careful observations I was obliged to come away without finding the exact spot, for it was necessary that one should have a long stout rope, by the assistance of which he might climb down the side of the cliff, in order to find the nest.

I learned, however, that only one pair of the birds was about the place, and that one pair had occupied the mountain as a nesting place for many years. One week later I again visited this place in company with

two friends. This time I had taken a long rope, and by the aid of it we went down over the side of the cliff, and, as good luck would have it, we found the eyrie just about where I had previously located it; but on reaching the nest it was found to contain only one egg; so nothing further was done that time. Just one week later, on the twenty-second of April, I again made a visit to the mountain. This time the bird did not leave the nest until I was within thirty feet of it, and then she launched out in the air with loud screams, soon bringing her mate to the scene.

All the time I was near the nest the old birds would fly near and quite often would dart at me with screams of defiance and rage; then they would sail out over the river several hundred yards away, and, on returning, swoop down at me as though they would tear me in pieces, thrusting out their talons and screaming all the while. They could have been easily shot, but I did not care to do this if I could get the eggs, as I wished to see if they would lay a second set.

This time I found the nest to contain four large eggs.

The nest was only a shallow place in the sand on a shelf of rock. There were a few feathers and a little grass in it. This shelf was about two feet six inches wide and then ran back in the side of the ledge three feet. The roof of this eyrie was only eleven inches from the surface of the shelf; thus the eggs were entirely out of sight until you reached the shelf. This shelf was about ten feet long, and from it were growing some grasses and ferns. As I have stated, the nest contained four eggs, which proved to be quite fresh. Three of these eggs were of a dark brick-red color and the other one was white for the ground color.

The first egg was the darkest, having a brick-red ground color and being thickly spotted and blotched with red and dark brown; near the large end was quite an area, evenly marked with light brown spots.

This was known to be the first egg of the set, as it was marked at the time the nest was first visited, when it contained only one egg.

The second egg was somewhat lighter and the spots of brown larger. The darkest and thickest spots were on the small end; some of the spots are of a very dark brown.

The third egg that I describe, the ground color is of a light brick-red at the large end, with many small spots and blotches of light brown, which extend over about two thirds of the surface, and the small end is of a brick-red for the ground color and the end has the appearance of being blotched with light brown, with a belt of dark brown spots radiating from the apex in opposite directions.

The fourth, as before stated, is a white egg in ground color, entirely covered with reddish brown spots about the size of the point of a pin. With a pocket lens these fine spots can be seen all over the surface. At the small end are several spots of light brown about the size of a pin head, and a little to one side are two spots of brown about one eighth of an inch in diameter; near these, and about the same size, are two dark brown spots, almost black. On the large end are several light brown spots and on the sides are a few large light brown blotches.

I will give the dimensions of the eggs in the order they are described: 1.69 x 2.04, 1.72 x 2.11, 1.71 x 2.15, and 1.70 x 2.13 inches.

To reach this eyrie with the help of a rope I had climbed about sixty feet down the almost perpendicular side of the cliff, and as I sat there on that lofty shelf of red sandstone and beheld the beautiful expanse of the Connecticut valley, with the silvery river majestically winding its course through it, I thought for a moment of the results of one misstep which would precipitate the unfortunate being nearly two hundred and fifty feet below. This thought, together with

those peculiar screams of the Duck Hawks as they sailed there in midair, caused me to reflect for a time of the omnipresence and wonderful power of the Creator.

Finally, with my treasures safely packed in a tin box, I made my return. Two weeks later found me in the same place. The Hawks were still there and went through the same manoeuvres, but there were no eggs in the nest. On July 11 I again went up the mountain and saw the Hawks as before. After going to the old nest and finding it empty, I made up my mind that they had young somewhere in the cliff. After three hours' hard work and climbing, I at last found the site of the new eyrie, but could not get to it with the aid of the rope. I could, however, see that there were three young birds in the nest, and there may have been another, as I could not see the rear part of the nest.

From the remains found some distance below the nest, it was evident that the young had been fed on Grouse, Chicken and Doves.

The Duck Hawk leaves here sometime in November. I might add that I saw one pair on Mt. Tom this summer. They probably raised young there, but I could not find the nesting place.

I. C. Greene.

The Pine Grosbeak in Michigan.

Of the winter birds of Michigan there are eighty-five or more, and in Kalamazoo County about 42° north latitude and 85° west longitude there are sixty-eight species known to be found in winter. These are divided into permanent residents, sixteen in number; half-hardy numbering thirty-two, and winter visitants twenty. Under this last division are embraced many birds, which are not constant in their visitation, and which may be recorded as unusual, or stragglers from the north. Of these irregular visitors, none are more uncertain in their appearance than the Pine Grosbeak. It may be that the species is a winter sojourner in our state

each year, but this has not, as yet, been proven. However the records show that the bird has occurred during successive years, and this is enough to suggest an appearance each season at some point.

In 1869 it appeared in Kent County, about 42° north latitude. In 1870 the species was abundant in Cass and Calhoun Counties, about 42°; 1871 found the birds in Van Buren County, 42°; 1872 and 1873 give no records in the state that I can find. In January, 1874, the birds appeared for the first time in Kalamazoo County in small flocks. In December, 1874, they again appeared, but in large flocks, and remained with us till late in February, 1875. Flocks also appeared in Washtenaw County, 42°, in winter of 1874-75, one hundred miles east of Kalamazoo, but the species was not seen again in that neighborhood, Ann Arbor, up to 1881. There are no records that I can find for 1876, 1877, or of any other year, in the state, excepting that of Kent County, where the birds were abundant in the winter of 1878-79. Since the date of 1879, I can secure no account of the appearance of this bird, although I doubt not that they have appeared in an irregular way in many parts of the state. If cold weather is the cause of their irregular southern migration, then the present winter of 1892-93, which is very severe, with deep snow, would give promise of their appearance. But though the species appeared in the east in large numbers, particularly in New England, they have not been seen to my knowledge in southern Michigan this season.

Going back and examining the old catalogues of Michigan birds we find that nearly all our state or local records, especially the earlier ones, omit this species.* Sager's pioneer list of 1893, document of house of representatives, omits it, as does also J. E. Cabot, 1850. In fact, half of the collectors

* This is strange, when the early collectors had taken the equally rare Evening Grosbeak as a Michigan bird. In fact, the latter was first discovered in this region, and first described from specimens secured at the foot of Lake Superior in 1833.

and ornithologists of Michigan have failed to meet with it. A careful observer might live a lifetime in one locality and fail to record this bird, while the flocks may have passed or even remained for the winter within a few miles of him. This is a straggler, the dispersion of which can only be understood through the combined attention of the observers of a state.

However, when the species makes its appearance in our midst it is an easy matter to study its habits, for the bird is very confiding. In fact, we can safely say that it is stupid in its lack of caution, and it is fair to believe it the most approachable and unsuspicious of all birds that visit us. It is eminently gregarious, like most of our smaller northern visitors, and even more so than its near relative, the Evening Grosbeak.

On the two occasions when I studied the Pine Grosbeak, January and February of the years 1874 and 1875, the flocks occupied the trees in the heart of the village. The birds were particularly plentiful in 1875, and large flocks could be seen at nearly all times in our public park, where they mainly roosted in the clumps of thick evergreens. The birds fed to a considerable extent on the buds of various trees and shrubs, much resembling the Evening Grosbeak in its manner of perching and biting off the buds. There are many habits in which the two are alike. In our village, there were at that time many American mountain ash trees, *pyrus americana*, which were loaded with the orange-colored berries. This fruit constituted the main reliance of the Grosbeaks during their visits; at the close of their stay with us there was not a berry left for the early Robins, which not rarely feed on them.

When feeding the birds seem oblivious of danger, and one can approach within a rod of a flock, but if one bird flies the flock quickly follows the lead, the movement of escape being accompanied by a series of their low, pleasing chirps. This call note, uttered singly when the birds are feeding un-

disturbed, is the only sound which I have heard from them in winter.

In the winter of 1874 I secured but three specimens, which were all in the gray or drab plumage, and I saw but one brilliant carmine male the entire season, in a flock of fifteen or twenty. An acquaintance of mine secured a fine drab specimen alive and confined it in a cage. In the spring it assumed a change of plumage, appearing of a tawny or yellowish and entirely different from the usual coat that we see here. This was undoubtedly a female, as it never gave voice to any song whatever.

In 1875 I armed myself with a shotgun and a permit from the president of our village board, and went into the park for birds and secured a large number, among which were three carmine males. There were several hundred birds in Kalamazoo that year, and though I cannot feel certain about the number all told, I feel safe in saying that there were just seven bright males in the lot. I think that the proportion of sombre plumaged birds to the carmine birds is about thirty or more to one. I have observed a flock of over fifty birds in January with not a brilliant specimen in it.

Several were captured alive by the boys, who stunned them with snowballs, and a large number were killed in various ways. At one time, and when the thermometer indicated 18° F., the birds were very sluggish, appearing as if stupefied. I killed one with a short stick by reaching up and knocking it from its perch. Still I do not believe that it is the cold which brings these birds or any other irregular northern visitors to our neighborhood.

One which I kept alive for several days fed on seeds of nearly all kinds, but appeared especially fond of apple seeds. It would tear apple cores to pieces very quickly, to get at the seeds. One bird, undoubtedly a male, which was captured in the plain plumage, took on the yellowish coat in May, I believe, and resembled the captive female

before described. It would during spring and early summer sometimes pour out a few pleasing but half expressed notes, which probably was the regular song but not strongly uttered. This one was undoubtedly a male, but it was destroyed before it ever assumed its red coat. It may be that this species possesses a peculiarity in coloration, like the not vastly removed Cross-bills, which are so oddly marked as to deceive us in regards to sex and age. The late Mr. Brewer first studied and explained the singular phases in the coloration in the Cross-bill.

A few birds were seen in March, but the flocks mainly disappeared in February, differing in this respect from the Evening Grosbeak, which I have known to remain till the month of May. *Scolopax.*

Kalamazoo, Mich.

Notes from Cobb's Island and Vicinity.

The following comprises a list of birds seen at Cobb's Island, Va., and vicinity, during a brief sojourn there from May 19 to 22, 1891:—

- 58. Laughing Gull. — Some seen at the island and others on the marshes, but very few at any time.
- 70. Common Tern. — A few seen on the beach and in the marsh.
- 74. Least Tern. — Only a single bird seen. There seemed to be a great scarcity of Gulls and Terns the whole time I was at the island.
- 80. Black Skimmer. — Four seen one evening, just about dusk, flying up the beach over the line of the surf.
- 120. Double-Cr. Cormorant. — About a dozen or twenty seen as we sailed in the "Broadwater" (between the main and the island). A few were seen flying, but most of them in the water.
- 163. American Scoter. — A flock of about six seen in the ocean, riding the waves just beyond the surf, near the upper end of the island.

194. Great Blue Heron. — On the 21st we sailed down to Smith's island through the "Broadwater." During the trip down we saw a great many standing in the shallow water over the flats about Smith's island, and at the heronry there we saw a large number of them.

201. Green Heron. — A few seen in the marshes. They would fly up from the edge of the "guts" as we sailed past. Quite a number of them were breeding at Mockhorn island.

211. Clapper Rail. — Very abundant on all the marshes, although seldom seen. I only saw one, it being flushed on the edge of a "gut," where it had no place to sulk away in the grass. Many nests were found, all at Cobb's Island. Most of them were built about six to ten inches from the ground, and some had drift grass drawn over the top to hide them. All had fresh eggs, the largest set being nine and the smallest five.

231. Dowitcher. — Only two seen, and killed over the decoys. About fifteen years ago, when I was down there, these were one of the most common birds shot. They are locally known as Grayback.

234. Knot. — They made their first appearance May 22, and I saw about a dozen flocks containing from ten to thirty birds each. They are known as Robin-breast Snipe, and are in my opinion the most delicious of all shore birds for the table.

243a. Red-backed Sandpiper. — Very plentiful, many bunches coming to the decoys.

246. Semi-palmated Sandpiper. — Large flocks would be seen darting about the marshes and over the decoys.

248. Sanderling. — A few seen running on the beach, and one shot.

254. Greater Yellow-legs. — Only one noted

- during my stay at the island, and it was killed over the decoys in New Marsh.
258. Willet. — One seen just as we landed at Smith's island. They were breeding in large numbers on Mockhorn island, but we had no chance to go there during my trip. They were much more plentiful when I was there last.
265. Hudsonian Curlew. — A great many single birds and some small flocks seen flying about the marshes, but they were very wild, and would not come near our blind.
270. Black-bellied Plover. — Quite plentiful on the marshes, and some seen on the sea-shore. We could always count on having some come to the decoys.
273. Killdeer. — A pair seen in the road (on the Main) as I drove from the station to the boat landing.
274. Semi-palmated Plover. — Known along with Wilson's Plover as "Ring-necks." They would be seen with almost every flock of small birds that would decoy.
280. Wilson's Plover. — These were breeding on the island, but I was unable to find their nests.
283. Turnstone. — Locally known as "Calico-back," and were very plentiful both in the marshes and on the sea-shore, some of them generally being killed from each bunch of birds that decoyed.
286. American Oyster-catcher. — Several pairs seen near the upper part of the island, where they were breeding. Locally called "Sea-Crow."
364. American Osprey. — None seen at Cobb's island, but fifty seen at Smith's island, where they were breeding.
490. Fish Crow. — A few seen flying over the marshes hunting for eggs.
501. Meadow Lark. — A single one seen on the dry marsh at Cobb's Island.
513. Boat-tailed Grackle. — Several seen at Smith's Island, where they were breeding.
550. Sea-side Finch. — A single pair seen in the dry grass in marsh at Cobb's Island.
613. Barn Swallow. — A few seen, and several nests found under the wharf and in the oyster houses.

William H. Fisher.

Baltimore, Md.

Green Eggs of the Red-tailed Hawk.

The Berkshires and other wooded hills which surround this valley afford ideal nesting sites for *Buteo borealis*. I think I am safe in saying that the Red-tail is our most abundant breeding Hawk; and although I take a few sets of eggs each season, I had never dreamed I should have the pleasure of collecting a set of the rare tint which furnishes the title for this article.

Early afield, for a short trip before business hours, on the morning of April 16, 1891, I found what I pronounced a new nest of the Red-tailed Hawk, in a big pine on the very top of Sheldon Hill. The next morning I saw the birds at the nest, and on the 21st I secured a fine set of two fresh eggs. They are of a beautiful greenish shade in ground color, so deep and bright that it is at once perceptible even by lamplight. One of the eggs is unmarked, with the exception of a few faint specks and lines of lilac. The markings on the other egg are of a delicate shade of lilac and fawn color, distributed over the entire egg in large flakes. They are truly a beautiful and unique set. Sizes, 2.39 x 1.81, 2.25 x 1.83. The nest was by actual measurement 71 feet from the ground, placed in a rather unusual position, being saddled on to a large limb, close to the body of the tree, and held in position by several small branches. The owners were the first of this species to

show fight when I was at their nest; they were very aggressive, swooping down through the tree, rather too close for comfort, while the eggs were being secured.

I made no special effort to locate their second nest. In fact, I seldom take second clutches of any species. I am afraid, though, the temptation would have been too great had I found a second set of this pair, especially if they had been of the same rare tint.

April, 1892, found me making frequent visits to Sheldon Hill, with the determination of again finding the nests of my Buteos, as I almost daily saw one or both soaring high above the hill. I had looked long in vain, and Wednesday morning, April 27, found me standing in the edges of the woods on the east side of the hill, after a last thorough search, with no nest located yet. Looking far across the pasture fields to a timbered side hill bordering the Lebanon Springs Railroad, I suddenly uttered an exclamation of delight. Perched high on one of the trees, in the margin of the timber, was a big Hawk, and another was sailing around over the woods. Bringing my field-glass to bear upon them, I saw they were Red-tails. I didn't have time to go over and investigate then, but I went home confident that in that particular tract of timber was the coveted prize. Nor was I disappointed, for on April 29 I visited the locality and had been in the woods but a few minutes before I found the nest, forty feet up, in the first big crotch of a mammoth maple. At my approach the female left the nest with a scream of mingled anger and despair. A couple of saplings were felled against the tree; it's easier to go up in this manner where the trees are as large as this one was, even if you have got climbers. Both male and female again came back and showed fight, swooping down through the tree while the eggs were being packed preparatory to lowering them with the line. I was delighted to again find

them of the same emerald hue as the set taken last season. They are of a deeper shade of green than that set. There is no particular difference in the markings of the two eggs; both are specked, spotted, and splashed over the entire surface with bright reddish brown. Large, handsome eggs. Sizes, 2.37×1.88 , 2.42×1.84 . They contained large embryos.

In addition to the above two sets I have still another green egg of the Red-tailed Hawk. A boy living at Hancock, Mass., just across the line from their town, early in April, 1891, set several steel traps for foxes around the carcass of a horse, but caught a pair of big Red-tails. He took them home and put them into a box, where the female soon deposited a single egg. This I purchased soon after it was laid. Comparing it with a series of Heron's eggs, I find the shade of green as deep as the average eggs of *Ardea virescens*. Size, 2.32×1.79 .

Benjamin Hoag.

Stephentown, New York.

The Slender-billed Shearwater.

There are several species of this genus of ocean-wandering birds met with off the coasts of the Canadian Dominion, but most of these occur on the Atlantic seaboard. So far as present research extends, only one species has been discovered on the western coast of North America, and this is but of rare occurrence on the shores of British Columbia. This is the Slender-bill Shearwater (*Puffinus tenuirostris*), a species differing in the form of its bill from those found off the Atlantic seaboard, though in its modes of life and general habits there is little or no difference. It is mostly found associated with the Fulmers or the larger Petrels, whose habits, resorts, and general modes of life are much similar, though at times it is met with near the shores of lonely islands, solitary and alone. It is a species of considerable size and wide expansion of

wing, can swim and dive well, and is capable of extensive and long continued flights. Its upper plumage is of a dusky hue, the lower parts whitish. It receives the name of Shearwater from its manner of procuring its food, which is chiefly small fish and other animal matter scooped up from the surface of the water and the crests of the rolling waves, over which it glides with remarkable gracefulness and rapidity. In its native haunts and home it is probably more a resident off the Asiatic shores than the coasts of America, and in the nesting period it may be found in tolerable abundance among the more outlying of the Aleutian Islands. Among naturalists little or nothing appears to be known regarding its nesting habits, but it is probable that it does not differ in this respect from the other species of Shearwaters which are known to nest in self-made burrows and crevices of rocks in small islands far out at sea, and to deposit as a set one whitish-colored egg.

Speaking of the Pacific Fulmers, Mr. Turner says, "With these birds are associated in a manner another bird of which I obtained at Amchitka Island a single specimen, which had been thrown up dead by the sea and so far advanced in decomposition that to lift it separated the members of its body.

This dead bird resembled those associated with the Pacific Fulmers, and was, so far as possible to identify it, a specimen of *Puffinus tenuirostris*. Natives of Atter, who were with me on Amchitka Island, informed me that birds of this kind (like the dead one) breed plentifully on the Semichi Islands. A short account of another species of this genus, called the Mutton Bird (*Puffinus tristis*), may still further illustrate some of the peculiar habits of this species, as in their general modes of life it is probable they differ but little. The *Tristis* inhabits the southern seas. It is somewhat larger than a pigeon and of a greyish-black color. It frequents Australia, New Zealand,

and other southern lands for the purpose of breeding. In September it arrives at its rookeries in such vast flocks as to darken the sun, and spend some days in digging and arranging the holes which are to serve as its nest. It then returns to the sea. Late in November, which is near mid-summer in those latitudes, the Mutton Birds again appear on their nesting grounds, and amid much screaming and quarreling, and an indescribable hubbub, each female takes possession of a hole, into which she retreats and lays a single egg. On this she at once begins to incubate, and while so doing goes out only at night. The flesh of these birds is valued as food, their feathers are also much prized; they are therefore eagerly hunted. Great numbers are destroyed, yet no perceptible diminution is made in their numbers by those wholesale slaughters.

William L. Kells.

Our Talented Blue Jay.

Billy first saw the light of day in the spring of 1892. He had left the nest before being captured, but soon became accustomed to cage life and a diet of boiled potato and bread and milk.

About midsummer he began to show the results of good training. His whistle often brought the dog to the back door when he was not wanted. It is the dog's duty to keep the hens off the lawn, but he often sleeps while on duty,—a "shee," "shee," from anyone in the kitchen always had the desired effect. Billy never slept during the day and his "shee," "shee" was as effectual as a human one. He never would utter these notes unless the hens were on the lawn or a team was passing by. His setting the dog on teams was a trick we could not appreciate.

Little Frank, 12 years old, reported at the house several times before he found that Billy's "Whank, Whank" had enticed him there. When Frank started for school

Billy's "Whank gon cool," was spoken so plainly that any stranger would know what he said. In the afternoon his flying back and forth through his cage, calling "Whank, Whank," was a sure sign of the little fellow's being in sight.

His singing, like the canary, was as good as going to the Howard Atheneum. To cut a long story short, he was a perfect mimic. He would imitate almost any noise, only to be forgotten when the noise ceased.

But such pets are usually fated to come to some sad end. A friend, early in February, 1893, desiring to increase my family of Screech Owls, brought me one securely (?) caged in a wooden box. He was at liberty in the morning and our Billy was dead in his cage. 'Tis needless to say that Mr. Scops quickly joined him over the river.

Was this bird anything out of the ordinary? Would another be as interesting as he? I shall try another next season and you may hear from me again.

A. W. Morse.

Notes from Belchertown, Mass.

Shrikes numerous early in the season.

Dec. 20, Wilson Snipe shot near mill-pond.

Dec. 26, Jan. 24, noted Yellow-shafted Flickers.

Jan. 24, 26, large flocks of Snow Buntings; found a Red Screech Owl in woods, partly eaten by a fox.

Jan. 26, watched a Bald Eagle for a long time flying over the pond, which had been drawn off. There were quantities of fish on the banks.

I failed to make connections with him. Saw one poor Lone Meadow Lark.

Bob White were plenty in October.

A few only were shot and the remainder have wintered safely.

Barred Owls were noted early in Fall. Pine Grosbeaks seen all the season.

Foxes have been very plenty and I have

seen a number of places where they have feasted on Ruffed Grouse.

J. W. Jackson.

Mocking Bird in Massachusetts in Winter.

About February 4, while looking for specimens of winter birds, I saw a strange bird that I had never before met with, but thought little of it until the 14th of February I shot the bird near the spot where first seen. It was a Mocking Bird (*Mimus Polyglottus*) which confronted me as I went to pick up my specimen.

The bird had lived here certainly for about two weeks without succumbing to the cold of this climate, which shows the bird can live here even in cold weather. The only way I can account for its being here at this time of year is that it must be an escaped cage bird. (The bird was identified by "Coues' Key" and Stearn's "New England Bird Life.")

H. E. Barton.

Duxbury, Mass.

What Killed the Swallows?

While out collecting the 21st of May of last year, I came across an old stone quarry where there were a pair of bank swallows flying around. On inspection I found an unfinished nest of the swallows and an old nest. The old tunnel ran back some six or seven feet and was filled with dead swallows; most of them were badly decayed. I pulled out 21 of the dead birds and had not cleared half the tunnel, so there must have been at least 50 dead birds in the tunnel. I would like to hear some one's opinion on the subject, through the columns of this paper. I also took a set of English Sparrow eggs from an old swallows' nest in the same quarry.

Erle Morton.

During the past two months we have received many articles of interest from our readers. All of which we will publish at as early a date as possible. Send them along.

THE
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THE GAME LAW.

Can you inform me whether Quail are protected by the Game Laws of this State or not? I have been informed that a case was taken in court at South End (Boston) and thrown out, because the law had been made defective by an amendment last winter.

C. C. F.

In regard to the Bird Law, the Massachusetts Fish and Game Association has found much fault with the decisions; but I think any lawyer will say it is a good law.

Section 1, Chap. 276, 1886, was repealed in 1891 and a new act passed in regard to killing game. See Sec. 3, Chap. 276, 1886.*

Having in possession game referred to in Section 1. Section 1 having been repealed, Section 3 refers to nothing at all.

If it had been amended, instead of repealing Section 1, it would have been all right. But Chapter 142 of 1891 † being enacted after Chapter 276, 1886, it could not apply. Therefore, it is unlawful to shoot game mentioned in Chapter 142, act of 1891, but not to have in possession.

† Acts of 1891, Chap. 142.

"Whoever takes or kills a plover, snipe,

sandpiper, rail, or any of the so-called shore, marsh or beach birds, between the first day of May and the fifteenth day of July, or a wild or passenger pigeon, or a gull, or a tern, between the first day of May and the first day of October, shall be punished by a fine of ten dollars for every bird so taken or killed."

* Acts of 1886, Chap. 276, § 2.

"Whoever buys, sells or has in possession any of the birds or animals named in this act and protected thereby, during the time within which the taking or killing thereof is prohibited, whenever or wherever the aforesaid birds may have been taken or killed, shall be punished by a fine of twenty dollars for the birds protected by section one, and ten dollars for the birds protected by sections two and four: *provided, however*, that any person, firm or corporation dealing in game may buy, sell or have in possession quail from the fifteenth day of October to the first day of May, and pinnated grouse, wild pigeons, and any of the so-called shore, marsh or beach birds, or of the so-called duck species, at any season, if not taken or killed in this Commonwealth contrary to the provisions of this act.

GAME — WHEN NOT TO BE KILLED.

Partridge or Ruffed Grouse — between Jan. 1 and Sept. 15, \$20.

Woodcock, between Jan. 1 and Sept 15, \$20.

Quail, between Jan. 1 and Oct. 15, \$20.

Duck of all kinds, between April 15 and Sept 1, \$20.

Plover, Snipe, Rail, Marsh and Beach Birds, between May 1, and July 15, \$10.

Grey Squirrels, Hares, and Rabbits, between March 1 and Sept. 1, \$10.

Deer are not to be killed at any time, \$100.

Insectivorous and Song Birds are not to be killed at any time, \$10.

Trapping, snaring and ferreting Birds and Animals, and setting snares prohibited at all times, \$20.

"We have just received eight very large Moose Heads, all fresh.

Brief Notes, Correspondence and Clippings.

The British Guiana government will make quite an exhibit at the Columbian Exposition. *With a healthy climate*, if properly opened up this country will reveal surprising sources of wealth. A few years since, gold was discovered, and now a large column at the exhibition will show the bulk that has already been mined.

Sugar raising is another important industry. J. J. Quelch, Esq., the commissioner, will spare no pains to show our people what is south of them. The country teems with animal life. Mr. Quelch, who is a sportsman and a naturalist, is curator of the government museum. Through his persistent personal effort he has secured a collection of the mammals, and brought them for the exhibit.

Collecting in that country is a very different matter from doing it in our climate. It is with difficulty that the specimens are secured, and harder still to cure them. Good collectors are not as plenty there as in our country, and the natives have to be brought into the service. The character and style or form of the animals are so different from what we see that it excites curiosity at once. There will be over a hundred specimens, consisting of Tapir, Jaguar, Ocelots, Ant Bear, Ant Eaters, Manatee, Otters, Alligators, Coon, Fox, Deer, Possums, Armadilla, Squirrels, Monkeys, Sloths, etc. Mr. Quelch has also brought many of the rarest and brightest bird skins of the country, and we would advise our readers, when visiting the exposition, to call on him.

The Pine Grosbeaks have been very numerous at Andover this winter. Every time that I go out I meet with one or more flocks of from 5 to 20 feeding in the ash, pine and apple trees. The seeds of the ash are their principal food, but they also feed on the apples that remain frozen on the trees.

November 30 I first saw them, but there

had been one or two others shot a few days before.

I have shot 13 specimens, 4 of which were males and only one in the red plumage. There had been 8 or 10 others in the red plumage shot here. I hope that other collectors are having as good success.

E. Woodruff.

ELKHART, IND., January 16, 1893.

Editor Ornithologist and Oologist:

In looking over some recent numbers I notice in the September number, 1892, Mr. Brotherton's article on the Rose-breasted Grosbeak in Oakland Co., Mich., and asking for information as to what other parts of that State this bird is found in.

Perhaps my notes are somewhat late, but may be of some use.

During the first week in June, 1892, I went with a party of campers from this place to Benton Harbor, Mich., floating down the St. Joseph River, collecting and observing the birds as we went.

We found Rose-breasted Grosbeaks common during the entire trip, especially so in the central part of Berrien County, from Niles to a point a few miles north of Berrien Springs. Took a set of two half-incubated eggs near Berrien Springs, and saw several other nests.

The birds seemed to be fully as common here as they are fifty miles farther south in Indiana.

Herbert W. McBride.

On December 22, 1892, I saw a Baltimore Oriole on our grape arbor, pecking at some frozen grapes. It was in good plumage. It was a keen, sharp morning, with snow squalls in the afternoon. I approached quite near to the bird. Although I have kept a sharp lookout, I have not seen it since.

Charles H. Neff.

Portland, Conn.

The communication in February issue, "A World's Fair Suggestion," was from Albert Lano.

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Vol. XVIII.

HYDE PARK, MASS., APRIL, 1893.

No. 4.

Distribution of Cooper's Hawk in Illinois.

W. E. Loucks. No. 34.

Summer resident; has not found it in winter. Tolerably common.

Nest usually in thick woods near a farm house; built in an oak.

Nest composed of small twigs, lined with a few pieces of hickory bark; sometimes an old Crows' or Squirrels' nest is used.

May 3, nest on an old Crows' nest, Hawks' nest and Crows' nest nearly 4 feet in thickness, 25 feet from ground; 1 egg. On May 10, 3 eggs from same nest.

May 23, same woods; same birds (?), 1-4; incubation begun.

Has not found more than 4 eggs, but 2 sometimes constitutes a set.

Has not found any marked eggs, but a set from Iowa is marked with reddish brown.

Has found incubated eggs on April 28, but usually nests first half of May.

Charles Wells. No. 45.

Resident; common in summer.

Breeds commonly, in early part of May. Nest 40 feet from ground.

Eggs measure 1.98 x 1.58.

Color, light greenish blue.

C. B. Vandercook. No. 77.

Summer visitant, (1 specimen February 23, 1891).

Nests: sets on April 17, 1-3; May 3, 1-4; May 7, 1-4; May 11, 1-4; May 19, 1-3; May 17, 1-4; May 15, 1-5. July 13, young hatched a few days from pair of May 11.

Nest in water oak plats where the trees

are very thick and tall, placing the nest against the trunk of the tree from 20 to 80 feet from ground.

Nest made of small sticks, lined with bark and sometimes cornhusks.

Set usually 4, 3 and 5 being taken.

Twenty-nine specimens average 1.88 x 1.50.

Largest 2.50 x 1.56; smallest 1.80 x 1.42.

Color, bluish white, some with spots and splashes of reddish brown.

J. C. Elliot. No. 88.

Summer visitant. Tolerably common.

Nests, but not commonly.

Thinks it nests further north, as it is more common in the spring and fall.

G. W. Readen. No. 92.

Resident. Tolerably common.

L. E. Baird. No. 95.

Resident. Common in summer.

O. Widmann, Old Orchard, Mo.

Summer visitant. Common in spring and fall. Comes and goes with the migratory birds.

Philo Smith, St. Louis. No. 74.

Resident. Fairly common.

Nests in May, using old Crows' nests partly made over.

Sets 4 and 5, usually 4. Two sets spotted with pale brown.

C. P. Foir, Clark Co., Mo.

Summer visitant; not observed in winter.

Not common. Nests in dense woods.

May 14, 1-3; nest in white oak, 40 feet up; composed of twigs, lined with coarse oak bark. Eggs fresh; greenish white, one spotted with dark brown.

Burtis Wilson. Davenport, Ia.

Summer visitor; tolerably common.

Arrives before April 10; leaves about October 20. Breeds sparingly in second growth timber, on either high or low ground. Fits up old Crows' nests in oaks 30 feet up.

Nests: April 9, building; May 7 it had 4 fresh eggs; built on an old Crows' nest, from which a set of Long-eared Owl had been taken. May 3, set 1-3, slightly incubated; old Crows' nest, 50 feet up, in oak tree.

Ridgway. "Natural History Survey of Illinois."

Cooper's Hawk: "This bold marauder is a common resident in all wooded portions of the State."

Kennicott. "Catalogue of Birds Observed in Cook County, Illinois," 1853-55.

Cooper's Hawk: "Common; follows the pigeons in their migration."

H. Pratten. "Catalogue Birds of Illinois, Wayne and Edwards Counties," 1853-5.

Cooper's Hawk: Wayne, no remarks.

Ridgway. "Catalogue of the Birds of Illinois." Bulletin of the Illinois Museum of Natural History, Vol. I.

Cooper's Hawk: "Resident. Breeds. Commonly known as the Blue Chicken Hawk, Swift Hawk, Quail Hawk."

E. W. Nelson. "Birds of North Eastern Illinois." Bulletin Essex Institute, Vol. VIII., December.

Cooper's Hawk: "Common summer resident. Arrives the last of April and departs the last of September or first of October."

E. W. Nelson. "Notes on Birds Observed in Southern Illinois, between July 17 and September 4, 1875." Bulletin Essex Institute, Vol. IX., 1877.

Cooper's Hawk: Rare.

Cooper's Hawk is not mentioned in vicinity of Cairo, in notes taken there.

"*O. & O.*," Vol. 9, July and August, 1884.

"Birds collected near St. Louis," Julius Hurter.

Cooper's Hawk: Transient, September 24, October 19.

"*O. & O.*," Vol. 8, March, 1883.

"Cooper's Hawk," H. A. Kline, Polo, Illinois.

Dates of nests: May 11, 1-4, fresh; May 15, 1-4, fresh; May 15, 1-5, fresh; May 17, 1-5, 1-5, slightly incubated.

B. W. Everman. "Birds of Carroll County, Ind."

Cooper's Hawk: "A rare resident, especially so in winter. Nest found May 10, 1883."

From the above reports I think we are safe in saying the Cooper's Hawk is a resident of all parts of this State, but the majority go and come with the migratory birds.

It nests in suitable localities quite commonly, preferring dense patches of scrub and black oak, on low ground. The nest is a bulky affair of sticks, lined with bark, placed near the trunk of the tree; dimensions, 18 to 24 inches in diameter, 12 to 18 inches deep. Nesting begins in April and continues through May.

From 2 to 5 eggs constitute a set, with 3 or 4 the most common.

They are usually a blue or greenish white and unspotted, but become darker as incubation advances.

Some sets or even one egg in a set may be blotched or spotted with reddish brown or drab, but many of the spots will prove to be blood stains, or tannin stains from the oak sticks in the nest, if analyzed.

Measurements of eggs are from 1.85 x 1.45 to 2.15 x 1.57, with an average of about 1.95 x 1.55.

Unfortunately no one seems to know the period of incubation.

The food of this Hawk consists of mice and other small animals, reptiles, birds, poultry, etc. It is perhaps the greatest enemy the Quail has. Dr. Strode has observed it chasing them in their coverts very frequently and says it is becoming more common in winter, as they increase in numbers.

It is the boldest of all the Hawks, coming into house yards after poultry, and, when its

prey has hidden, even lighting on the ground to hunt for it. *A. C. Murchison.*

Further Notes on the Distribution of the Long-eared Owl and Cooper's Hawk in Illinois.

B. T. Gault. No. 8.

Transient. Have but one record for this locality, August 22, 1890; open grove in village. February 10, 1877, took one on outskirts of Chicago, in oak grove.

Cooper's Hawk.

Summer resident; not common.

Have never noticed them before April 15. Equally abundant as *B. borealis*.

Four or more pair nested in Glen Ellyn in spring of 1891, when 2 sets of eggs were taken, 1-2 and 2-4, both probably from same birds.

Eggs of set 1 quite freely marked, chiefly at larger end, with spots of different shades of brown and lavender.

Set 2, one egg spotted, another slightly marked with light brown, the remaining 2 of the normal bluish-white color.

Nests found in rather open, second growth timber, principally black oak, and in medium-sized trees, about 25 feet from ground, old Crows' nests being slightly remodeled for the occasion. Eggs in both instances deposited on small pieces of bark, averaging 1 inch by 2 inches, probably from dead limb on same tree.

Set 1-2 taken May 4, fresh; while set 2-4, taken May 17, was somewhat advanced. Nests within a few rods of each other.

A. C. Murchison.

N. Vickary, Lynn, Mass., reports that a Labrador Gyrfalcon was shot at Ipswich, Mass., March 11, 1893; also that a Logger-headed Shrike was brought in to him March 29, and a Mocking-Bird on April 4. The party who shot the Mocking-Bird reported that there was a pair, but he failed to secure but the one.

Queer Occupant of a Goldfinch's Nest.

It was a bright winter morning, with the thermometer dallying among the small figures, the fields white with their winter overcoats and silence almost unbroken, not even the chirp of a Snowbird to break the wintry quiet, but as I passed into the street and walked up the deserted road the depressing stillness of nature was suddenly broken by the lively chattering of a flock of Goldfinches which sprang up from the roadside at my approach, where they had been gathering a breakfast scant and dry from the tufts of grass and weeds whose tops extended above the snow banks that covered the ground. There is a cheeriness and life about the confused chattering of a flock of Goldfinches that gives a charm to the bleak landscape, though there is little in the note or the winter garb of the bird to remind one of the sweet song or the gaily painted songster that scattered the down from the thistle head last summer.

With graceful evolutions and soft and gentle mingling of happy voices, the little flock gathered in a tree top by the roadside, the very same tree where a pair of their number during the heats of last summer built themselves a nest and essayed to rear a family. It was a broad branching oak and one of its far-reaching arms extended quite over the carriage track, and there among the dense foliage they built the beautiful nest. Travellers in their wagons could easily have raised themselves up and looked into it, situated as it was in full view of every passer, but I doubt if any one beside myself ever observed the dark spot among the foliage.

As the birds gathered in the top of the tree that winter's morning I saw in bold relief against the bleak landscape that little nest still securely held in its place, defying the storms and gales of winter and appearing as sound as when I first looked into it in the heats of last July. The Goldfinch

builds a compact nest, soft, firm secure and substantial, and I have observed them out-riding sometimes the rigors of even a second winter and reflecting credit on the marvellous ingenuity and skill of the architect.

It recalls to my mind some curious circumstances in the history of this nest, chiefly to note which this article was penned. About two weeks after I first observed it, apparently just about completed, I essayed to look into it one day in passing. Pulling the branch down till the nest was in easy reach I placed my hand on it, and to say I was startled but faintly expresses the feeling with which I let loose my grasp on the branch as a lively little animal sprang from the nest like a flash almost into my face and thence to the ground. One of those long-tailed mice that I sometimes meet in the woods had ejected the rightful owner and appropriated to his own use the cosy little nest. This tree stood quite alone beside a much travelled highway, the branch on which the nest was built extending nearly at right angles from the trunk, as before intimated, directly over the wagon track about twenty feet from it and about twelve feet above the roadway.

It is the strange and unexpected that surprises us, and of all things to have found a mouse in such a situation seemed the very last thing in the last possible place. The mouse met a well deserved fate on the spot. The birds reared their brood in another nest in the top of a tall chestnut tree near at hand and the deserted nest still waves a conspicuous object at the end of the naked branch over the street.

John N. Clark.

Saybrook, Conn.

Andrew Downs, the veteran taxidermist of Halifax, Nova Scotia, died August 26, 1892, aged 81 years. He was born in New Jersey, removed to Halifax early in life, where he was apprentice to his father, William Downs, a plumber and tinsmith. He traveled extensively in Europe and America.

Harry Jordan White.

Distribution of the Bobolink in Illinois.

Since the publication of the list of contributors' names in the February number, four additional names are herein presented. It is desired to increase the number of contributors, and we trust that those in this and adjoining States who have not already responded will do so soon.

Contributors will greatly oblige by sending their reports in on time. If desired, the whole yearly report may be sent in at once.

F. L. Charles, Cook County, No. 7.

B. T. Gault, Du Page County, No. 8.

C. F. Tindall, Morgan County, No. 54.

E. S. Currier, Keokuk, Iowa.

County No. 3. J. E. Dickinson.

Very common summer resident. Arrives the first week in May; departs the latter part of September.

County No. 3. F. A. Gregory.

Summer resident; common breeder in meadows along the creeks.

County No. 6. Gordon Schanck.

Summer resident. Arrives latter part of April; departs latter part of October. Breeds abundantly in clover fields from May 15 to June 15. Incubation lasts about two weeks; eggs 4-6; one brood.

County No. 6. O. H. Swazey.

Summer resident; very abundant; breeds in meadows; arrives the middle of May; departs the latter part of the summer.

Counties 6 and 7. W. E. Pratt.

"Abundant in Lake and Cook Counties, especially so on the broad prairies just west and south of Chicago, where hundreds of pairs breed. In Lake County there is a nest in nearly every large field. From the 20th of May to the 10th of June, fresh eggs may be found, and the nest complement varies from an exceptional instance of 3 to 7, 5 and 6 being the usual number here." Has found 3 or 4 Cowbird's eggs in a nest of this bird.

County No. 7. George B. Holmes.

Summer resident. Arrives about the first week in May; departs in the latter half of August. Males precede females in spring migration by a few days. Breeds abundantly in June. Says they are occasionally imposed on by the Cowbird.

County No. 7. F. L. Charles.

Common and familiar summer resident, from early May until into August. Breeds in open prairies last week in May or first in June. One brood raised; eggs 4-7, average 5. Feeds on wild strawberries.

County No. 7. H. Gillingham.

Summer resident; breeds commonly. Arrives in large flocks. Has seen over fifty in one flock. Breeds latter part of May and first of June. Eggs 3-4-5-6; one brood.

County No. 7. D. A. Young.

Summer resident. Arrives the last of April; departs during August. Breeds commonly in fields and prairies from the last of May until July. Eggs 4-5.

"Birds of Northeastern Illinois." E. W. Nelson. Counties 6 and 7.

Abundant summer resident. Arrives the last of April and leaves the middle of August.

County No. 8. B. T. Gault.

Summer resident; common breeder. Arrives first week in May; departs latter part of September or first of October. Commences to assume winter plumage the last of July.

County No. 10. L. W. Nichols.

Summer resident. Common breeder in swampy pastures among the bogs. Nests in June and July; eggs 4-5. Thinks only one brood raised.

Davenport, Iowa, opposite No. 15. B. H. Wilson.

Summer resident. Arrives May 6 to 10; departs last of August. Abundant in clover fields and breeds in the early half of June. Thinks one brood is raised. Eggs 4-5.

County No. 16. Dr. A. C. Murchison.

Transient; tolerably common. Arrives first week in May; has not observed it in the fall. Occurs in flocks of five to twenty individuals. Has not found it breeding.

Has found them in County No. 17 in June; thinks they were breeding, as singing males were observed.

County No. 18. A. Hamfeldt.

Summer resident. Not very abundant. Arrives early in May, generally the first week; does not have date of departure. Nests in meadows.

County No. 25. R. M. Barnes.

Summer resident; fairly common. Breeds in limited numbers in meadows containing red clover, from May 20th to June 10th; eggs 4-5-7; one brood.

County No. 26. V. Chase.

Transient. Observed a flock of 50 to 75 birds in the spring of 1892. A male was observed through June and July in a meadow; undoubtedly had a nest.

Keokuk, Iowa, opposite No. 31. E. S. Currier.

Regards it as a regular but far from common migrant, passing north the first two weeks in May. Has observed them as late as May 24th. [Probably the birds seen on the latter date remained through the summer.—W. E. L.]

Clark County, Mo., opposite No. 31. C. P. Foir.

Regards it as a summer resident, but not common. Arrives early in May; departs in the latter half of July. Has found no nests.

County No. 33. Dr. W. S. Strode.

Transient and rare summer resident. Has increased in numbers within the last few years. Has not found it breeding, although observed in summer. Earliest date April 10, 1889.

County No. 33. W. S. Cobleigh.

Transient and summer resident. The greater part of them pass north. Arrives by the 10th of May. The summer residents move east instead of south in the fall with their young.

County No. 34. B. F. Bolt.

Transient; a few remain. Has been found breeding. Nests in meadows, difficult to find.

County No. 34. W. E. Loucks.

Transient and summer resident. They pass through this vicinity about the latter part of April or first week in May. Have no record of fall migration, or departure. This bird is a rare summer resident and breeds in clover fields.

County No. 36. D. Meixsell.

Summer resident. Arrives about the first week in May. Majority pass northward, migrating at night. Flocks of 10 to 20.

County No. 40. G. C. Pearson.

Summer resident from May to September. Eggs 5-7.

County No. 45. Charles Wells.

Rarely seen. Observed a flock May 3, 1892. [Undoubtedly transient. — W. E. L.]

County No. 54. C. F. Tindall.

Observed flocks in this county early in the spring. [Undoubtedly transient. — W. E. L.]

List of birds collected in the neighborhood of St. Louis, Madison County. No. 73. Julius Hurter.

Transient, May 2d to 10th.

County No. 74. Philo Smith, Jr.

Seen in migrations sparingly.

County No. 75. W. L. Jones.

Transient only.

Vicinity of St. Louis, County No. 75. O. Widmann.

Regular transient. Migration extends over three weeks, from April 28th to May 19th. Experience with fall migration limited to one record, September 14, 1892; a large flock of moulting birds in the bottoms.

County No. 77. C. B. Vandercook.

Transient. Passes north in small numbers the first and second week in May. Has not observed it in the fall. Known as the Skunk Blackbird, Ricebird, Reedbird, Rice Bunting and Meadow Wink.

Catalogue of the Birds of Illinois. H. Pratten, Trans. Agri. Soc. 1853-54. (Wayne and Edwards Counties, No. 82 and 83.) Mentions the Bobolink in this list. Found as a migrant probably.

County No. 88. Rev. J. C. Elliot.

Transient, passing in May. Has not seen them in the fall migration.

County No. 95. Prof. L. E. Baird.

Transient. Known as the Army Bird and Skunk Blackbird.

When one glances over the preceding reports and sums up the distribution of the Bobolink, it is not difficult to see the position this bird holds in the State. It is not a bird of general distribution, as will be seen by an examination of the reports.

It is plainly seen to be a common summer resident in the northern extremity of the State. Advancing southward, we find it still a summer resident, although decreasing in numbers as we proceed, as far as counties 31, 33, 36 and 40. Reports from the first three show that it is a rare summer resident, but the report from No. 40 does not designate whether rare or common. Here we can undoubtedly draw the southern limit to the breeding of this bird, as it is not reported from any point south of the above numbered counties.

From counties 73, 74, 75, 77, 88 and 95, reports show that the Bobolink is only transient. Pratten, many years ago, mentions the Bobolink in his list of birds, counties 81 and 82, but says nothing as to whether transient or summer resident, but undoubtedly it was the former. In counties 45 and 54, it is evidently transient, although in No. 36, directly north of No. 45, it is a rare summer resident. From Keokuk, Iowa, and Clark County, Mo., opposite No. 31, we find it reported a migrant, Mr. Fore considering it also a rare summer resident in Clark County, but Mr. Currier, although his latest date is May 24th, regards it as only transient. North of this the reader can trace for himself the occurrence of this bird, and its increasing abundance as he proceeds north. In the counties around and in close proximity to Lake Michigan, the Bobolink seems to reach the height of abundance.

As previously remarked, the southern limit of this bird as a summer resident is the central part of the State. Here it is found in such limited numbers in the breeding season that it is seldom observed.

The Bobolink is transient throughout the State, as many do not remain in the northern counties, but pass further north. From the material in hand, I cannot say exactly at what date this bird enters the southern extreme of the State in the spring. We find it passing through 75 and 77 in the last few days in April and first and second week in May, but by comparing the arrivals in the south with those in the north, very little, if any, difference in the time is found. Reports from counties 3, 6 and 7 show that the Bobolink arrives the last of April or first week in May. From this it appears that the bird must travel quite rapidly through the southern half of the State. The period of the spring migration in Illinois lasts for about three weeks, viz., last week in April and first two in May. Of course there are exceptional cases of early and tardy arrivals; note the early date in county No. 33, April 10th. Mr. O. Widmann sends such an interesting report on the movements of this bird in the spring, that I take the liberty to quote:

"The Bobolink, a transient visitant with us, is one of the most interesting species for the study of spring migration, for the following reasons:

"It is regular in its migration as a bird can be; it is a very conspicuous bird, cannot be overlooked; it cannot easily be confounded with anything else; males, females, old and young birds are distinguishable. In the neighborhood of St. Louis, its northward migration extends over three weeks, from April 28 to May 19, earlier and later dates are rare. The time of their regular transit may be divided into three periods:

"First period from their appearance in the last days of April to the fifth of May; highly dressed males, singly or in small parties,

always singing, generally seen on wing going north at all hours of the morning.

"Second period from May 5 to 12; numerous troops of 20 to 40 males, some not in full dress yet, and first females, composing 10 to 25 per cent of the troops. Mostly seen on wing, but also feeding on ground or concerting in treetops.

"Third period; females predominate, sometimes 90 per cent of a flock; troops of immature males and, toward the end of migration, young females with obviously plain headmarkings. The troops of this period stay sometimes all day at one place, are less noisy and more on the ground feeding.

"My experience with this species in the fall migration is limited to one record, September 14, 1882, a large flock of moulting (blotched) birds on trees in swamp in the bottomland. I do not mean to say that they do not pass through these bottomlands regularly every year; possibly they do, and probably they do so without staying long at one place, but my visits to these places were too unfrequent and irregular. All I know is that they do not pass over the same grounds which they visit in the spring."

Mr. George B. Holmes also reports that the males precede the females.

In the spring migration, the Bobolinks move in small flocks of ten to thirty individuals each, pausing here and there to feed and rest, and the males making the meadows ring with the renowned Bobolink song.

Of the fall migration, data is so meagre that I am not warranted in advancing any statements or forming any definite conclusions. The majority of the reports contain nothing on the fall movements of this bird. This is not surprising, for the reason that many of the contributors probably do not recognize the bird in its dull winter plumage. Mr. B. T. Gault, of county No. 8, reports that the Bobolink commences to assume its winter plumage in the last of July. Mr. Widmann's only fall record was made on a large flock of moulting birds.

The dates given in the reports on the fall migration are so varied and incomplete that it is difficult to trace any regular movements in their southward journey. It is reported from county No. 6 that the bird remains into October; county No. 3, departs latter half of September; county No. 7, latter part of August, and in county No. 31 we find record of its departure in the latter half of July. It therefore appears that the departure of this bird in No. 31 is earlier than in the extreme northeastern county, No 6, whereas it should be vice versa. Undoubtedly the food supply has considerable to do with the movements of this bird as it has with others. The irregularity in the dates of the different localities is probably due to this. In some of the counties the food supply may become exhausted, and in consequence thereof the birds are compelled to change their feeding grounds quite early in the summer, or they may move to some resort to congregate with other restless flocks, eager for their southern departure. Mr. Cobleigh presents a fact which might to a certain degree help substantiate the above. He reports that, after the young are strong enough to accompany their parents, the Bobolinks move east instead of south in the fall. It is with regret that I am unable to take up the subject of fall migration further, but owing to the meagreness of the data in hand, it would seem impracticable if not impossible to proceed.

The substance of the preceding reports can be summed up in a very few words: The Bobolink is transient throughout the State; summer resident in the northern half; abundant in the northern quarter.

W. E. Loucks.

Peoria, Ill.

C. W. Boles, Ponkapog, Mass., while hunting Ducks, shot a fine Otter over his decoys. It was the finest specimen that we ever saw, measuring 52 inches and weighing 24 pounds.

A Criticism.

Matter appeared in your issue of February last which has prompted me to offer a protest. I trust you will not deny me space in your columns to enter my objections, as I assure you that the following remarks are in no way intended as an aspersion toward any writer or other person, but rather as a means of protection for the readers of the "O. & O." from future inflections of this nature. The first article referred to, on page 22, setting forth the valuable work of L. L. Dyche at the coming "World's Fair," is excellent in scope, and fully convincing as to Mr. Dyche's ability as a workman in his chosen province. However, in the selected matter heralding Mr. D's powers as a taxidermist, you fail to record the fact that he had unlimited territory from which to select his specimens, and leave one to infer that the collection in consideration is from Kansas.

On your front page you advertise Kansas's grand show, and in the article mentioned embrace the Moose, Caribou, Grizzly Bear, Rocky-mountain Sheep, Elk, Wolverine and Ocelot. The article is, therefore, certainly very misleading, for, if I know anything of the range of these mammals, *none of them are found in the State* giving this exhibition.* Kansas is justly entitled to Coyotes, Foxes, Bisons, Jack Rabbits, Antelopes, Lizards, Prairie Dogs and Burrowing Owls; but I cannot understand why she wants to encroach upon the Montana Big-horn, Maine Moose; or why she will adopt the other incongruous and surprising species. A group of Horned-toads (so-called), with a cluster of Burrowing Owls, Rattlers and Prairie Dogs, living in the harmony represented by our childhood's geography, would be much more consistent, and also more comprehensive, than this conglomeration of aliens on Kansas' prairies.

* The Elk is, perhaps, an exception, but certainly six or seven species are here wrongfully accredited to Kansas.

The "World's Fair" is to be a wonderful show, and we should all be very proud of it. And we are proud of it. However, we should, individually and collectively, try to support it by uprightness, and an earnest desire to have nothing misleading. The present tendency is to overdo matters and to assume preposterously. As an instance I may cite one of two cases which personally came to my notice.

The commissioners of a neighboring State, who were intent on making a great exhibit from their section, undertook to give a representation of the fish-eating animals of that State. Finding themselves short of material, I was requested to supply certain birds, and furnished them twenty-seven species of fish-eating birds from my locality. These birds are to be exhibited as representatives of that State, although they came from Michigan.

Another matter worth criticising is the article or tabulated notes on page 29. I have no ill feeling toward the writer of page 29, but I feel sure that I am voicing the sentiments of the large majority of the readers of the "O. & O." in saying that we have had altogether too many notes of this kind in the last few years. A simple list of eggs, giving the size of sets and the number of eggs in a collector's cabinet, sounds idle, rapid, and surely is emphatically nonsensical. A reader cannot help but think that the writer is making a spread of his collection without being able to add anything to the advantage of his studies. *Scolopax*.

[The writer of the above criticism, "Scolopax," does a great injustice to Mr. Thomas H. Jackson, a list of whose Warblers' eggs was given on page 29 of the February ORNITHOLOGIST AND OOLOGIST. Mr. Jackson did not compile the list in question, and the responsibility of having done so rests with me.

I thought it would be interesting to the readers of this journal to have lists of por-

tions of the celebrated oological collections in the United States, and the communications that have been received from numerous subscribers convinces me that I was correct in the view I took of the matter. That "Scolopax" does not like them is unfortunate, but then every one does not think alike.

He is entirely mistaken in assuming that the lists are published in any spirit of glorification, for besides being interesting to many readers they serve a useful purpose, in that they show the average number of eggs laid by a bird; this average being derived from the comparison of the numbers in each set. — J. P. N.]

J. W. Jackson, Belchertown, Mass., received on April 13 a Great Blue Heron and Loon, on April 8 a Common Tern. He states that two Otters were taken during the winter.

Cold Weather Notes from Stephenstown, New York.

We had an abundance of cold, cloudy and windy weather during November, with numerous squalls and flurries of snow, the rainfall for the month being very light. The prevailing weather throughout December was bright, crisp and cold; no snow to speak of in this locality.

One belated Robin seen November 12, Tree Sparrows came on November 2, and abundant from date of arrival.

Last Woodcock recorded November 2. *Philohela minor* in this locality is doomed to the same fate as the Ruffed Grouse — extermination — unless given better protection, or the number of market hunters reduced.

Red-tailed Hawks noted every few days. I surprised a fine old male eating a late Thanksgiving dinner November 26; he was dining on a large plump chicken.

First Snow Buntings December 5; a flock of about one hundred.

I have looked in vain among the flocks of

Tree Sparrows for *Junco hyemalis* since November 12.

Screech Owls are very abundant; the bulk seen and reported are in the grey phase of plumage.

Pine Grosbeaks are in abundance; I have never recorded them here in such numbers before. First seen December 7, a single female feeding on a big white-ash; next record December 19th, a flock of six, four fine red males and two females. Since December 19, flocks of from eight to fifty noted daily. Grateful indeed I am for ample opportunity for observations on these beautiful birds; the first sound I hear as I step out into the frosty morning air is their pleasant notes, and I am sure to find flocks every morning feeding on the juice of crab-apple trees near the house, or over in the tangle along the river; later they feed on the ash, maple and tamarack.

Why may we not have the Morning Grosbeak? Surely he is a bird of the morning, with all the rosy tints of the eastern sky reproduced in his plumage.

The closing week of December was particularly cold, still and bright, from zero to seven below every morning, and the forests covered thick with hard frost which sparkles like millions of diamonds in the morning sunlight. *Bubo virginianus* makes the most of the lovely moonlight and goes courting every night, and, judging from the notes which issue from the woods, his suit is received with favor. Behold a change as we cross the threshold of the new year; a perfect downpour of rain during the afternoon and night of January 1st, snow about all disappears, and the ice goes out of the creeks.

A flock of four Ducks made us a flying New Year's call January 2; species not positively determined, probably Red-breasted Mergansers. It soon grows colder and to-day we are back at zero weather.

Benjamin Hoag.

January 4th, 1893.

Some Holiday Trips.

(Continued.)

Our next find of any importance was a nest of the Hairy Woodpecker, also containing young—four in number; two were males and two females, the former showing the red on the head very plainly, even at this early age. The nest was only 2½ feet from the ground, in a hole in a living oak. The growth in the immediate vicinity was very much stunted, the land being mainly pine barrens, sand lots and scrub oak tracts, and this may account for the fact of the nesting site being at such a low altitude, although it doesn't explain why the birds chose such a locality.

We found two remarkable sets of Baltimore Oriole's eggs on this trip—one of *two* and the other of *six*, in both of which incubation was advanced. It seemed a peculiar coincidence that we should secure our smallest and our largest set the same day within a few miles of each other.

* * *

May 30, 1890, found me again tramping over the fields and woods about Lake Grove, this time with quite different experiences in some respects, but less luck on the whole than in 1889.

The Mourning Dove, which we had found quite abundant the previous year, were only fairly so on this trip, but we found a long-sought for nest. It was about eight feet from the ground in the first crotch of a good-sized pine which stood on a well-wooded hillside. It was made of grasses and contained two fresh eggs. The bird left the nest and disappeared with great celerity.

It seems a little strange that we have never found the nest of this bird before, for we have traversed the pines in this locality pretty thoroughly for a number of years, and the nest is said to be easy to find. I don't remember of ever having seen a Dove in the pines before; they are very wild, and it is almost impossible to shoot them except

by remaining concealed near where they pass to and from their feeding grounds in the sandy lots and stubble fields.

As I was getting over a hedge into a lane, an Ovenbird, *Sciurus ourocapillus*, walked away in such a peculiar manner that I was led to suspect a nest, and on looking around a little, sure enough I saw the nest, which was quite conspicuous. A little cedar bush had been cut off about four inches from the ground and had commenced to sprout again; at the foot of this the bird had made a slight hollow and built the nest, with the cedar bush for a "pillar." It was arched over very neatly and faced the south, being by all means the most artistically situated nest of any bird I ever saw. It was made of grasses and a little hair, but was so loosely put together that, on taking it up, it entirely lost its shape, and gave no idea of its original beauty.

I will close these reminiscences with a short account of some of our nocturnal adventures. My notes on the Whippoorwill say "exceedingly common." On the night of the 29th, during a walk of two miles, I must have heard as many as 25 individuals (I counted up to 15). I stayed in the country four nights, during each of which the moon shone brightly (full on June 3) and the chorus of Whippoorwills was such as I have never heard, before or since, and to the ears of a city ornithologist it was peculiarly delightful. Just about 7.30 P.M. a single bird would open the concert, and almost at once their weird and melodious song would resound from every point of the compass; the singing continued with more or less regularity till after 10 o'clock and I cannot say how much longer. My host said he heard one at 3 A.M. The birds were quite tame, and by stepping cautiously we could approach within ten feet of the singer; but, unless he sat on the fence, it was impossible to see him. They sang almost as frequently from a stump or the bare ground as from the fence, but always in one of these three positions. The song is quite ventrilo-

qual, sounding much nearer than it really is, and, as one approaches, it does not grow any louder, thus leading one to think that the bird is receding. I have been deceived in this way time and again and have even fired a charge of shot at the place from which I was positive the sound proceeded, and where I thought I saw the bird, only to find that I had missed my aim by about three feet. The clucking note, preceding the song proper, was very noticeable.

This wandering over the moonlit fields in pursuit of these ghost-like birds was a novel experience, and gave me a very "uncanny" feeling, manifested by chills up and down the back and the desire to don an extra coat.

While walking across a ploughed field about 9 o'clock we flushed a Vesper Sparrow from her nest under an overhanging furrow; it was sunk deeper than I ever saw one before, and contained three eggs, while one cold and sandy one lay outside.

The Nighthawk was not as common as the Whippoorwill; very few were seen in the daytime and but few heard after dark; the period when the most were seen was just before the Whippoorwills began to sing. Then they were seen flying and "booning" in every direction, the greatest number being seen on the night of the 30th, when as many as fifteen were flying over a space of five or ten acres.

Arthur H. Howell.

Brooklyn, N.Y.

They are having quite exciting times in Providence, R.I., and all about a Baby Elephant. It seems that one was taken to Roger Williams Park on approval. The high authority decided that the price was beyond the means of the Zoological funds, while all the youngsters of the city approved of the purchase. The press of the city took up the case, and opened its columns to the boys and girls. Penny subscriptions are the order of the day, and we predict that "Baby Roger" will remain.

Nesting of the Red-breasted Nuthatch.

Of all the birds that enliven the woods, there is probably no family, with the exception of the Warblers, more interesting to me than the Nuthatches. Although possessing neither the beautiful songs nor brilliant plumages of many of our woodland birds, they yet make up the deficiency in this respect by their great industry and evident cheerfulness under all conditions.

The species are few in number, yet the family is so widely distributed that there is probably hardly a locality that cannot count at least one species among its fauna.

It was my good fortune to spend a part of the summer of 1890 in the town of Ossipee, beautifully situated among the hills of east central New Hampshire, a few miles east of the far-famed Winnepesaukee, so aptly named by the Indians "The Smile of the Great Spirit." There, in the forests of pine, spruce, and hemlock, the Red-breasted or Canada Nuthatch (*Sitta canadensis*) is a resident and a common breeder, and a good opportunity was afforded me to observe its nesting habits.

Five nests were found in situations ranging from ten to thirty-three feet from the ground. The first evidences of their breeding were noticed late in April, when I discovered a pair of birds engaged in excavating a nest. This was at the greatest elevation of any found, and was situated near the top of a dead basswood stub, fortunately accessible by means of several smaller adjacent trees. The entrance was circular and none too large to admit the birds. The pair worked alternately, as is usually the case with birds that excavate a nest. When one had been working ten or fifteen minutes it would appear at the entrance and utter its notes, like the syllables *cheap, cheap, cheap*, when immediately its mate would appear and take its turn at the work.

I watched them from time to time, and on

the 17th of May took the nest, containing seven fresh eggs. The cavity was about twelve inches deep and was excavated with considerable skill.

Other nests containing eggs were found on the 22d, 28th, and 31st of May. They were all similar in construction to the first found, being rather slightly made of the fine inner bark of some tree, probably the basswood. In some of the nests a few feathers were intermixed with the other material. The eggs, which ranged from five to seven in number, were similar in size and color to those of the Black-capped Chickadees, but were more pointed than is usually the case with the eggs of that bird.

In this connection it may be well to mention the discovery of a nest of these species in eastern Massachusetts. It was found on the 8th of June, 1887, near my home in Wilmington. It was in a pine stub near a dwelling; was composed of cottony substances evidently picked up near the house, and contained at this date young about half-grown. The birds had been very abundant during the preceding winter, and many had lingered until late in April, but these were the only birds that I observed during the summer.

Edward A. Preble.

Dep't Agriculture, Washington, D.C.

Among the Birds of Northern Pennsylvania.

The *avi fauna* of few parts of this State is so little known as that of the north-central counties. Doubtless much that is new and interesting might be learned concerning the distribution of our birds, by a careful study of this part of the State.

The writer had the pleasure of spending a week in Potter County in the northern part of the State in the latter part of June, 1871; object was to visit friends at Elmer, about nine miles from the New York line. No preparation was made for studying the bird-life of the vicinity; indeed, did not even have a gun, and so was unable to collect

any specimens. But, in my rambles about the town, I noted several differences between the summer birds of Potter County and those of my native Mercer County, which may not be entirely devoid of interest.

Potter County is in the northern foothills of the Allegheny mountains, and rugged hills, with narrow valleys between, are the constant feature of the scenery. Lumbering is the principal business, and large saw-mills are scattered through the valleys. Some of the hills have been cleared and burned over, leaving little vegetation but plenty of charred logs and stumps; others are still covered with "the forest primeval."

The burnt districts were almost destitute of bird-life, a young Crow which I caught and a family of Wrens being the only birds found. Was unable to determine certainly whether the Wrens were the common House Wren (*Troglodytes aedon*) or Bewick's Wren (*Thryothorus bewickii*), but think they were the latter.

While following a trout brook through a ravine in the wooded part June 25th, I was greatly surprised to see a female Junco fly up in front of me. It was the first time I had ever seen *Junco hyemalis*, except as a visitor from the north-land, brightening our winter with its cheerful chirp, and was delighted to meet it in its summer home. On June 27th I met with quite a number of Juncos, both male and female, this time among some bushes on the hillside in a place much like those frequented in winter. Evidently the young were out of the nest and were following the old ones, keeping together as they do in winter. Did not hear them utter any note different from the ordinary "chipping song" heard in winter. Doubtless the season of song was over; the rest of the summer would be spent in the more sensual pleasures of eating. The Junco was seen only on these two days, but that was sufficient to convince me that it is a common breeder in Potter County.

On the same day that I saw the family of

Juncos (June 27), I was so fortunate as to meet another bird which I had hitherto known only as a migrant. While wandering along the wooded hillside, my ear caught the charming ditty of the Black-throated Blue Warbler (*Dendroica caerulescens*). Following the sound, I soon saw a splendid male, flitting about among the bushes, quite at home and as gay and as brilliant as during the spring migration. During my walk I observed a second male; both this one and the first one continued in song while I was within earshot. No females were seen; doubtless they were on their nests near at hand. Other Warblers were seen, but, without a gun, it was impossible to identify them. Another family of Wrens were met with, evidently of the same species as those noted above.

Another noticeable feature of the bird-life was the apparent absence of the Brown Thrasher (*Harporhynchus rufus*). Not one was seen during my entire stay, and "mine host," an intelligent lumberman, informed me that it did not occur. The absence was the more marked as the valley was full of localities apparently suited to its habits. Indeed, the whole Thrush family seemed but poorly represented. But a single Cat-bird (*Galcoptes carolinensis*) was observed, though they were said to be not uncommon. Robins seemed less common than in the older and more highly cultivated districts, while the other Thrushes were scarcely noticed at all. *F. L. Homer.*

Meadville, Pa.

The trouble with the Exposition managers at Chicago appears to have been that they didn't begin to rush things soon enough.

Harry Austen, Halifax, Nova Scotia, has in his collection a Red-tailed Hawk in black plumage.

G. L. Kent, Belchertown, Mass., reports a Snowy Owl on March 2.

THE
ORNITHOLOGIST AND OÖLOGIST

A MONTHLY MAGAZINE OF

NATURAL HISTORY,

ESPECIALLY DEVOTED TO THE STUDY OF

BIRDS,

THEIR NESTS AND EGGS,

AND TO THE

INTERESTS OF NATURALISTS.

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DAVIE'S NEW WORK ON TAXIDERMY.

Mr. Davie has still further increased the number of plates for his new work. He now announces that there will be 90 full-page plates. We have just received proofs from several of the new ones.

Plate VI. shows the styles of artificial eyes that are used, the sizes being in conformity with those manufactured by THOMAS HURST. In connection he proposes to give a list of sizes and colors required by many varieties of Birds and Mammals.

Plate XVI. is from Hawks, showing the methods of winding.

Plates XL., XLI., XLII. are from specimens mounted by the author.

Mr. Davie is determined to cover the whole ground, and the delay in publishing is due to his making the additions that were not contemplated at the beginning. The subscribers will be well repaid for waiting, and those who do not subscribe may wake up to find it too late to obtain a copy at the present price at which it is offered.*

F. J. Carpenter, Mount Kesco, Me., reports the first Great Blue Heron on April 10.

*Subscriptions received by us at \$5.

WANTED—GOOD ROADS.

We would call the attention of our readers in this State to the great importance of there being a permanent Highway Commission, and request you all to use your influence with your representatives in the General Court to secure the passage of the bill submitted by the Massachusetts Highway Commission. A commission composed of men from the various parts of the State would command the confidence of the entire commonwealth, and this would not be possible if but a single individual was appointed as State Engineer to do the work of a commission.

The betterment of the highways is of importance to all, not only in this State but over the entire country.

Brief Notes, Correspondence and
Clippings.

A photograph of Oliver Davie's new museum before us, shows a collection of birds that he has been procuring for the Ohio State Exhibit. The cases have been temporarily removed and the birds arranged on walls and floor in an easy off-hand manner. They are set off by some specimens of Mr. Davie's work, such as heads of Buffalo, Moose, Deer, Peacock Screens, &c. We hope, when Mr. Davie gets fully settled down, to give our readers a description of his rooms and his private collection.

Now is the time to look out for Dermestes. They are beginning operations, and the introduction of Cryst Alba into the cabinets is the proper course to take.

Manly Hardy, Brewer, Me., writes that a neighbor has a live Troupial which has killed two cats that went to his cage by striking them with its bill.

Ed Van Winkle, Van's Harbor, Mich., wishes to correspond with all who have made observation, in the Upper Peninsula of Michigan, in order to make a complete list of

birds and mammals. We hope that he may have a hearty response.

R. M. Barnes, Lacon, Illinois, has recently added 1600 eggs, collected by George Noble of Savannah, Ga., to his private collection.

With the opening of the spring collecting birds' eggs will take a tumble in price. We fear that the day is coming when the collectors will not get enough to pay for their salt.

J. T. Park, Warner, Tenn., asks if any reader can inform him if there is an instance on record where the eggs of the Cowbird have been found south of 35° or 36° in the Mississippi Valley; or any of the nesting of the American Robin south of 35°.

Carl Fritz-Henning received a Golden Eagle from Carroll, Ia., measuring 7 feet and weighing 12½ pounds.

Also a Bald Eagle from Montana, measuring 7 feet and weighing a little over 10 pounds.

It seems that the authorities at Central Park, New York, have been drifting into the practice of naming the Gorillas, Baboons and Hippopotamus after prominent members of Tammany. Since the November election there has been a grand kick, and now there will be no more Muldoons in the monkeys' cage.

The latest article of interest to collectors is our new collecting tube, with extractor. It is nicely made, strong and durable. Their shooting qualities have been well tested. One charge of powder such as is used for a 12-gauge shell is sufficient for 6 charges for the tube. They shoot strong and close, and do not tear the specimen to pieces. It is an article that every collector who sees it will want.

We have before us a photograph of a group of Flamingo, 7 in number, mounted by W. E. Balch, which we pronounce the finest piece of work, with Flamingo for the subject, that we have seen. We would call the attention of all to the fact that the hen bird

does not sit straddling the nest stiff-legged, as held to by quite a number, and in which we confess we never took much stock. In preparing the mounting Mr. Balch went so far as to obtain samples of the mud, clay, nest material and grass from the locality in which the birds were taken. This group is now the centre of attraction at the Fairbanks Museum.

Charles I. Goodale, the well-known Boston taxidermist, died at Somerville on April 12. Coming to this country in the pioneer days of taxidermy, he associated himself with John Wallace, of New York. From there he came to Massachusetts, and entered the employ of Mr. Vickary, who established him in Boston, where he became the leading taxidermist for several years, and his little shop on Sudbury Street was the rendezvous of the sporting fraternity. His work was characteristic of the style that was considered remarkable a few years since, and would be criticised as not being kept up with the improvement that has been made in the art of late. Few could cope with him in the amount of work that he could turn out, nor could any one say that he did not do all in his power to please his host of friends and patrons.

To the Horned Lark.

When February yields,
From lanes and farrowed fields,
Her billowy drifts of January snow,
And softening south winds blow;
The Lark, with clear, exhilarating notes, —
As, high in air, she sings, and singing floats
On poised and fitful wings, —
Her springtime message brings.
In stubble fields, at rest,
She builds her snow-girt nest,
And, silent, broods her eggs, while March winds
blow,
Yet milder, softer grow.
Then feeds her young, frail, clamorous, hungry
things,
Quaint emblems of the fruitage summer brings
When showers of April rain
Have kissed the growing grain.
P. B. Peabody.
Owatonna, Minn.

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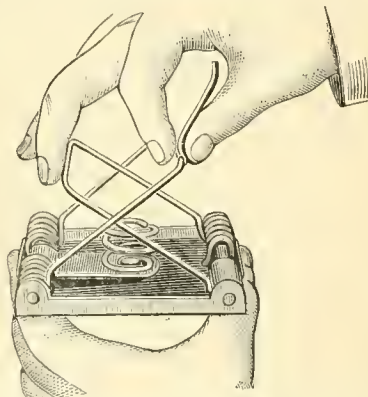
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No. 5.

Alexander Wilson.

"Alexander Wilson had genius, and not much of anything else. Very little learning, scarcely any money, not many friends, and a paltry share of the world's regard while he lived."

I extract the above from the historical preface of Coues' "Key" in "Forest and Stream" for May 29, 1884, by R. W. Shufeldt, M.D., U.S.A. I know it was written in a kindly spirit, but it is likely to carry an erroneous impression of Alexander Wilson to those who have never had the pleasure of reading all his works. To simply admit that Wilson had genius does not do him justice.

Wilson was born in 1766. At the age of thirteen he was apprenticed as a weaver, which at that time could be only about one remove from a pauper's life. I know this from a forty years' connection with the manufacture of woollen goods; but if anything further is needed, we get it from the following extract from his "Groans from the Loom":—

"To hang like a scarecrow in rags,
And live o'er a seat-tree on naught,
Good Gods! shall a mortal with legs,
So low, uncomplaining, be brought?"

Although Wilson had a terrible dislike for weaving, he served faithfully for three years, or until August, 1782, when he wrote the following lines on his indentures:

"Be't kent to a' the world in rhyme
That wi right meikle wark an' toil,
For three lang years I've sert my time,
While's feasted wi the hazel oil."

This is written in a much better hand than one would expect from the fact that he had had no opportunity for education. But then modern scholars hardly consider penmanship learning, and yet he was but sixteen years old. If he got any schooling, it could be but a little and of a very poor quality. After his apprenticeship was completed he served four years at the loom in various places, during which time he wrote all his earlier poems, which he published in 1790 in an octavo volume of 308 pages, when he was twenty-four years old. During the time that this work was in the publisher's hands Wilson made a peddling tour through the east of Scotland seeking subscriptions with a prospectus, and after the work was issued he peddled the book from door to door, only two hundred copies being issued with the date of 1790, which he sold, one of which and a copy of the 1791 edition are now before me. His peddling excursions, which continued for three years, were not financially successful, but the freedom of such a life was just what Wilson craved, and they were no doubt among the most interesting years of his life. Wilson had genius at twenty-four and was a wonderful student of human nature. He knew the short-comings of his fellow-men too well; hence his love of solitude in after life.

Let us skip back to 1790, when Wilson was but twenty-four years old. We find him selling from door to door the volume of his poems, 308 pages, 8vo., old style leather binding. This book he had written, published, and was peddling. He did not seek

a publisher, but published it himself; nor did he seek to sell it through dealers, but sold it himself. Yet he was but twenty-four and with "little learning." Where he ever got the money to do this will forever remain a mystery. At the time he was selling this book he was peddling dry goods, and even the renowned "Yankee peddler" of to-day has not improved on his method; and if any fair-minded man will read his diary during this peddling trip he will admit that he was a genius at twenty-four, and a thorough student of human nature. To know human nature too well is to drive one to live in the woods by daylight, and into the garret at dark to play "the flute" and be called "melancholy." We should like to copy the closing paragraph in the introduction to Wilson's poems, edition of 1790, but space or time will not permit.

In 1794, or four years after the above mentioned volume was published, we find Wilson in America, with impatience his master as he left the ship at New Castle, Delaware, preferring to walk to Philadelphia. It was on this trip that he saw and shot his first Red-headed Woodpecker, which he admired so much. In due time he arrived in Philadelphia, in a strange land "with little money" and that borrowed. His travels and change from the life of a weaver at not over a dollar per day to that of a school-master for little, if any, more, and often much less, is well known to all ornithologists. From these scant earnings he often had money for "Duncan" to help him buy his farm and support his family, and published his own matchless work beside.

I have before me a letter written by Wilson to his friend Bartram, dated August 16, 1804 (unpublished). He had just seen for the first time a Pileated Woodpecker and had evidently never heard of one at that time, and yet in Vol. 4, 1811, we find a rare illustration and a good description. Was it genius or learning that enabled him to accomplish this in so short a time? If he had

few friends and little money, how did he make out to go to Pittsburg by stage, then to buy a boat, which he named "The Ornithologist," and travel in this way several hundred miles; then leaving the boat, buying a horse and travel through the then wilderness of Kentucky and other Southern States to New Orleans on horseback, often getting mired in the morasses, and yet taming and having as a companion an Illinois Paroquet? If one wants to know Wilson, he should read his visit to the grave of poor Lewis on this trip. How did he travel through the whole Atlantic seaboard on horseback; how did he make out to travel through the New England States into Vermont, New Hampshire and Maine?

We have before us a letter dated Boston, October 12, 1808, written on common unruled letter paper. The first page, besides date and address, contains fifty-nine lines, second page 63 lines, third page 63 lines, with 18 lines on the outside page—used at that time to fold, as no envelopes were then used—making 203 lines of exceedingly fine penmanship, almost as distinct as print to-day, after the lapse of seventy-six years. In a commercial life this would be considered learning, but in a profession we fear it would not count. Wilson had few friends we admit; but every friend he had was thoroughly honest, and his friendships only ended with life. If there is on record in the English language the superior or equal of Alexander Wilson as a friend, or as a man, we have never seen it. When he was struggling to earn money to publish his work, and working almost night and day for a mere pittance, he divided that money with Duncan, and wrote with it the most cheering letter. Who but Wilson could do this? To benefit his fellow-men by dividing his last hard-earned dollar was no sacrifice to him.

Every American historian should read Wilson's "Foresters," not as a poem (poets do not walk from Philadelphia to Niagara Falls and back in the late fall), but for the

interesting facts it contains. Only Burns could have crowded more facts into as few words, and even he could not have made it more interesting, as the following brief, random extracts will illustrate :—

“A knapsack crammed by friendship’s generous care,
With cakes and cordials, drams and dainty fare.”

And writing of Bucks County, he says, —

“For wheat, fair Quakers, eggs and fruit renowned.”

I have five editions of “The Foresters.” There are several more that I have not yet been able to find. Four editions prove that it was appreciated. I think I have seven different “Lives of Alexander Wilson,” and have not yet secured the one by Mrs. Brightwood. In conclusion, let me advise all to read Alexander Wilson; read all you can get of his writings, and, like the writer, you will thank God that he never studied Greek or Latin. His works will live and his style remain popular with the millions when technical works will only be sought by technical scholars and shunned by the general reader.

The cause of all Wilson’s troubles was “honesty.” The world used him roughly for this, but he was not to blame, for he was born so and could not help it. He died in 1813. This planet of ours has given birth to millions of human beings, some of them very learned, but Wilson’s equal has not yet made his appearance. *Jos. M. Wade.*

P.S.—The above was written some nine years ago. It may interest some of the readers of “O. & O.,” and that is the only excuse for not destroying it during those nine years. The writer has given but little attention to bird life or ornithologists.

A very interesting article has recently appeared in the “Manchester Union,” Manchester, N. H., entitled “The Hawk Family,” illustrated by eight cuts of a superior character. We would advise our readers to send for a copy.

Distribution of the Mocking-bird in Illinois.

J. E. Dickinson. No. 3.

Has seen one specimen (about 1876 or 1877) in full song; but does not think it occurs in a wild state.

F. A. Gregory. No. 3.

Has never observed it.

W. E. Pratt. No. 6.

Does not mention it.

B. T. Gault. No. 8.

Mocking Bird.

No record by me for this locality or north-eastern Illinois.

L. W. Nichols. No. 10.

Has never found it in this State.

A. Hamfeldt. No. 18.

Has not met it.

Dr. A. C. Murchison.

A very rare summer resident.

Have met only 3 specimens. One nest found in a hedge 6 feet from ground, 50 yards from house; composed of strings, weeds, stalks, grass, etc.; 4 eggs hatched, but were taken by snake. Eight eggs (from Alabama), average .98 x .68; largest 1.04 x .71; smallest .93 x .65. The color is light greenish blue, with dots and blotches of russet; in 3 specimens the ground color is hardly visible. The only other specimen was a male in full song, shot the middle of May.

R. M. Barnes. No. 25.

Occurs as a very rare straggler.

One observed in May, 1891, a male in full song.

Virginus Chase. No. 26.

Has not met it.

Dr. W. S. Strobe. No. 33.

Has not met it.

W. E. Loucks. No. 34.

Has not met it himself.

D. S. Meixsell. No. 36.

Rare summer visitant.

Nests rarely; 3 found.

First. June 3, 1889, in hedge fence 3 feet from ground; made of small sticks, grass,

stems, etc., lined with roots and grape-vine bark ; 3 half grown young.

Second. A few days later, in scrub oak 5 feet up, 4 young.

Third. May 28, 1890, 8 feet up in a dog-wood tree ; 4 eggs, color, greyish blue, blotched with chestnut red or yellowish brown.

Measure, .90 x .71, .89 x .70, .90 x .72, .91 x .73.

Has observed the birds several times in hazel thickets last summer.

G. C. Pearson. No. 40.

Was at one time common, but now only occasionally met with.

Charles Wells. No. 45.

Has not met it.

W. L. Jones. No. 75.

Resident. Breeds in hedges, and pastures where there are crab-apple trees.

C. B. Vandercook. No. 77.

Rare resident. Noted on October 16, 1886 (1) ; April 21 (1) ; April 8, 1889 (1) ; October 11, 1889 (1) ; March 23, 1890 (1) ; December 9, 1890 (1) ; January 7, 1891 (1) ; December 24, 1892 (1). Has examined 8 nests, all placed in hedges or brush piles, made of twigs, fine grass, rabbit's or horse hair and hempen fibers. Size outside, 4 inches deep ; diameter, 8 inches ; inside, 3 inches deep, 3½ inches diameter.

Set, 3 or 4 eggs ; average size, .93 x .74 ; color, pale greenish, marked with large and small spots of chestnut.

Set 1-3, April 28, 1892 ; set 1-4, May 1, 1892.

Rev. J. C. Elliott. No. 88.

Summer resident. Not so common as formerly. Nests in osage orange hedges, sometimes in orchards.

G. W. Rearden. No. 92.

Resident. Tolerably common.

Nests usually in haw trees, crab-apple trees, brush heaps, etc. Nests are usually one-half mile apart. Build from 2 to 15 feet from ground.

Nest about 1st of May.

Set, 3 to 5 ; average 3. Color, dirty gray-

ish brown, profusely speckled with darker brown.

One pair raised broods in his garden last year.

O. Widmann, Old Orchard, Mo.

Well known inhabitant. Met with at all months of the year. Cannot stand severe winters.

Arrives from middle of March to middle of May ; in some years full numbers do not arrive until June. The first song has been heard as early as February 17, after a mild winter, but in 15 years nine dates for first song are found as late as April and sometimes not until the latter part of it. As a rule first song is not far from date of arrival, but sometimes they keep silent for over a week. They sing all summer, even in hottest days of July.

Has never heard the song between August 4 and October 6, but from that date to November 17 they are not infrequently heard to practice. Is not sure that they make two successful broods in a year, because all early broods that came to his knowledge came to an untimely end.

Philo Smith, St. Louis. No. 74, Bond County.

Resident, but not common.

Nests ; seems to prefer osage orange hedges. A large bulky nest, like Brown Thrush, 3 to 7 feet from ground. Found from May 5 to June 10, the last being second set. Set, 4 and 5.

C. P. Foir, Wayland, Mo.

Summer resident. Not abundant.

Arrive May 1st, leave about August 1st.

Breed sparingly.

May 10, 1887, 1-4, in wild plum tree, 6 feet from ground, composed of twigs, weed stalks, grasses, etc., lined with wool ; roughly made.

Young were taken from the nest, caged and hung on a porch, where the old birds continued to feed them.

At the same time a second nest was made, similar to first, in a plum bush 30 feet from

the house. Four eggs laid and hatched. These were also caged and fed by old birds until they were full fledged.

C. J. Lemen, Uniontown, Ky.

Resident, but not numerous in winter. More common on high lands than low.

Robert Ridgway. "Natural History Survey of Illinois. — Ornithology of Illinois," Vol. 1.

"In Illinois, as in many other States, its distribution is very irregular, its absence from certain localities apparently in every way suited to its requirements being very difficult to account for. Thus, while one or two pairs breed in the outskirts of Mt. Carmel nearly every season, it is nowhere in that vicinity a common bird. Thirty miles further north, however, in the vicinity of Olney, where the country is more open, I have found it almost abundant, on one occasion six males having been seen and heard singing along the roadside during a three miles drive from town.

"Mr. H. K. Coale informs me that he saw a Mocking-bird in Starke County, Ind., 60 miles southeast of Chicago, January 1, 1884; that Mr. Green Smith had met with it at Kensington Station, Ill., and that several had been observed in the parks and door-yards of Chicago. In the extreme southern portion of the State the species is abundant in suitable localities, and is resident through the year." (Olney is in No. 79 on the map.)

Robert Kennicott. "Catalogue of Birds Observed in Cook County, Illinois." (Trans. Ill. State Agric. Soc., I, 1853-55.)

"Rare; known to nest in Cook County." (No. 7).

H. Pratten. "Catalogue of the Birds of Illinois, Wayne and Edwards Counties." (Nos. 82 and 83.) Trans. Ill. State Agric. Soc., I, 1853-55.

"Mocking-bird." (No remarks made.)

Ridgway. "Catalogue of the Birds of Illinois." Bulletin of the Illinois Museum of Natural History, Vol. 1.

"Entire State, but very local, even in southern part, where resident."

"*O. & O.*," Vol. 9, July and August, 1884.

"List of Birds Collected near St. Louis, Mo., Julius Hurter." (Madison County, No. 73, map.)

"Summer resident; abundant."

"*O. & O.*," Vol. 8, February, 1883.

A. H. Mundt, Fairbury, Livingston County (No. 23 on map).

"Mocking-birds have built here for several years. Though scarce, are increasing every season."

E. W. Nelson. Bulletin Essex Institute, Vol. VIII., December. "Birds of North-eastern Illinois."

"Mocking-bird: A very rare summer resident. I know of but few instances of its occurrence in the vicinity of Chicago. Dr. Hoy has recorded six nests obtained in the vicinity of Racine, Wis."

E. W. Nelson. "Birds observed in Southern Illinois between July 17 and September 4, 1875." Bulletin of the Essex Institute, Vol. IX., 1877.

Cairo and vicinity.

"Mocking-bird: Rare. Only observed at Mound City." (Six miles above Cairo.)

Not given by Everman in his "Birds of Carroll County, Ind."

W. S. Cobleigh. No. 33.

Has found it a summer resident. Arrives about the middle of May. Are quite rare. Has found it breeding. Nests placed in haw trees about 6 feet from ground; composed of twigs, rootlets, etc., lined with feathers.

Nests about the last of May. Thinks they raise two broods.

Set, 4 to 6 eggs, of a greenish ground color, marked with blotches of chocolate and purple; size, .98 x .78.

Charles W. Tindall. No. 54.

Summer resident. Not common.

Nest on June 21. Two pairs seen during two years, from 1890 to 1892. Nest contained 3 eggs, hatched on June 25.

From the information at hand, it would

appear that the Mocking-bird occurs as a summer resident in nearly all parts of the State, very rare or perhaps a straggler in the northern third of the State, yet Kennicott gives it as nesting near Chicago and Dr. Hoy records 6 nests near Racine, Wis.

It is found in various localities as a summer resident in the middle third, in some places being even tolerably common. In Fazewell County it has been found quite regularly during the nesting season. In the southern third it is even abundant in some localities, while in others it is rare or seems entirely wanting. It seems to prefer the lower side of the Illinois River and to follow it up—even as far as Chicago—without crossing it to any great extent.

The distribution of the Mocking-bird is very uncertain. In one county it will be found and in another adjoining it will not be seen, or is very rare. To all appearances the localities are equally suitable for it.

One drawback to its study is the fact that by the average person Thrushes, Catbirds or even Shrikes are often called Mocking-birds, making any report except from a "book" observer unreliable. Most of the reports give them as preferring a hilly country where there is plenty of sand.

The nest is placed in some kind of a thorn tree or brush pile and is so nearly like that of the Brown Thrush as to need no description. It is usually not over 6 feet from the ground.

The date of nesting varies greatly in this State, extending from April to June; but the general opinion is that two broods are reared in one season.

The number of eggs varies from 3 to 6, with an average of 4.

The eggs vary greatly in size. Davie gives .94 x .71 as a common size.

A. C. Murchison.

I found the nest of a white-bellied Nuthatch May 15, with nine fresh eggs; nest in oak 30 feet from ground. *G. Plummer, Boston.*

My First Day of Egg Collecting.

Egg collecting was far from being a science at Omaha when Charley Meyers and I entered the High School. We found about eight fellows there with collections ranging from 20 to 120 varieties, and the man who had the 120 collection was the only one who had really read or made any study of his collecting; the others had heard that there were books about birds and eggs, but guessed that they didn't amount to much. Most of them looked with admiring awe at the 120-man, and talked knowingly among themselves of Kingbirds and Buntings, and boasted of two sets of Doves' eggs in one day.

Charley and I were both taken with the idea of collecting, and likewise gazed admiringly at the 120-man, who had gotten every kind of egg around Omaha, so rumor said, and for a while we also talked of getting numbers of common eggs that we ought to have been shot for taking. We went into the subject with a good deal of enthusiasm, and after a little we caught and passed all but two or three of the other boys, and along towards the close of the season we discovered a book in the public library that was devoted to birds and eggs and was not half so dry as one would think, and from that we gathered the idea that perhaps the 120-man had *not* gotten every kind of egg that flourished near Omaha. We read that book quietly, and after a while it began to dawn upon us that off in the woods near the river there was no good reason why there should not be Crow and perhaps Hawk nests, a possibility that nearly took our breaths away, for no collection in town boasted of a Hawk's egg, and the only Crow's was one in the collection of the 120-collector, and he had gotten it by exchange with a collector in another city, and he held it as the pride of his collection.

When we recovered from the shock of the idea, we held further communion with the book and became certain that those river

woods, which were five miles from town and never been explored so far as we could ascertain by careful questioning, contained a mine of wealth for collectors. We were greatly surprised to read that any birds nested in March, and we hardly believed it; we knew that none of the fellows there ever started out until May, and May first was considered too early to hope for much success.

We determined that next spring we would make those other fellows open their eyes if that book, which was written by a man named Coues, was at all reliable, and accordingly we took the first holiday and tramped off to the woods to verify our suspicions if possible. They were verified. We found that the woods comprised a big marshy area of ground, with numbers of big cottonwood trees scattered through; and fifteen minutes after entering the edge we spied a bulky object in a tree some distance off, and racing over found that it was really an old nest, and a big one. A Crow's nest without doubt, we assured each other, and shook hands gleefully. During the next hour we found three more wrecks, and then went home satisfied and full of wild enthusiasm and excitement, which we found hard to hide at school the next day.

It was a good while till spring, though, and we cooled off some, read our book carefully, ordered a bigger drill for the prospective eggs, made a couple of larger and deeper collecting boxes, and completed arrangements by getting a ball of heavy twine to lower the boxes and eggs from the nests. "It will be awkward lugging all that stuff along, but it would be too risky bringing those eggs down in our mouths." We were ready to tackle a colony then.

April 19th—a day I shall always remember, I believe—was the day we set for our hunt. The book said the last of March or the first of April, but that was ridiculous. It was too cold for a bird to sit all day on a nest then. The man that wrote that book

was a little imaginative, we said, and the 19th was probably too early, but we would go then to make sure.

As the day grew near we became nearly wild with the exciting prospect; though, as we afterwards confessed to each other, neither of us had but a faint hope. Those nests had looked *so* old.

The 18th was muggy, and we were blue, for we were forbidden to go if it was raining. We cheered each other up, though, and as we parted at school I told Charley I would be there all right in the morning. I was to call for him, as he was nearest the woods, and I was to be there at 4.30 so we could get there by good day-light and have plenty of time for a long hunt. I woke at three, three-quarters of an hour before I needed to; but I hurried into my clothes and went out doors. My heart sank, for though it was too dark to see it *felt* wet and I knew it was going to be a bad day. I went dismally in when suddenly it flashed over me that I was forbidden to go if it was *raining*. It *wasn't* raining, and I gobbled my breakfast cold, tied up my lunch, grabbed my box and rushed off before it could begin. One whistle brought Charley out, declaring that I was late and that he had been waiting an hour and a half; but on consulting the watch that I had borrowed from my brother we found that I was twenty minutes early, and that he had been waiting about sixteen. We aimed for the edge of town, and had hardly reached the outskirts when a steady drizzle began; but that was nothing now, and we sang and whistled and once in a-while gave wild yells to let off the excitement we felt.

I looked at the watch as we reached the edge of the woods and found that it was 5.15, and then I tripped over a root and threw it accurately at a log near by. The hands went on a strike immediately, although the watch was not a repeater, and we were minus the time. We were a little put out at that, for the rain was still with us and there could be no sun to tell time by. Charley

remarked that I was a lunkhead at first, but we concluded that our inner boy would notify us when it was lunch time, and plunged into the woods.

For half an hour we tramped through the wet grass and saw never an old nest even; then through the mist I spied a big mass of something in a tree a good ways off. I thought I did at least, and pointed it out to Charley, but it was so indistinct that we both became doubtful about its being a nest and hesitated about going after it, for it looked a good half a mile away. It was the only thing we had seen, though, and we started for it, and it apparently started for us at the same time, for we approached it with astonishing rapidity. We found that the fog and mist gave the distance effect, afterwards. It *was* a nest, and when we got within about 300 feet of it a huge bird suddenly reared itself on the edge, took a brief look at us, spread its wings, and with three flaps it had disappeared among the trees. But we had seen it. "A hawk!" Charley yelled, and in a moment we were at the foot of the tree, dancing with delight. It was an awful tree to climb when we came to look at it; a large cottonwood with the nest a good 60 feet from the ground, and not a limb below 50 feet. That didn't bother us much, for we were both good climbers, but what did bother us was the action of that Hawk. According to the books we had read she should have circled around with shrill cries, and occasionally darted fiercely at our heads; but instead of that, she had apparently gotten disgusted with the climate and gone South. That was what Charley suggested as he wrung the water out of his hat so it would not drip down his neck. I suggested that she had gone after other Hawks to help fight us, and Charley said perhaps I had better take his hatchet up with me. (I forgot to say that as I had found the nest I had the privilege of climbing it. What idiots boys are! And yet, now I think of it, I saw grown men not long ago fighting for tickets that would en-

title them to walk six miles in a procession, carrying a greasy and ill-smelling torch, to celebrate a victory that did not mean half so much personally as that nest did to us.) I thought that the box and ball of string were enough to carry, and dispensed with the hatchet and trusted to Charley to scare the Hawk off with sticks if she came back, and up the tree I went with a heart beating high with hope.

It was a terrific climb, for the tree was wet and slimy, and I clawed down dirt into my eyes, and my feet refused to take hold, so that I was just about breathless when I reached the nest and peered over the edge; but all that I had left came out in a wild yell of joy, for there were three eggs in the nest that looked as big as moons. "Three beauties," I called to Charley, and he immediately fell to executing a startling war dance, while I sat on a limb and spit out the dirt and waved my hat.

I can feel yet the crawly feeling I had as I wrapped the eggs and lowered them in the box. I think that if they had fallen by any chance I would have hit the ground before they did. When I reached the bottom Charley had stopped standing on his head and was blowing one of them. Then we concluded that the book man was not a falsifier, for those birds were nearly grown. Charley said that the first one stuck his wing out of the hole and waved it, but I didn't believe that. We blew ourselves purple in the face, but got very poor results; then we bent pins and straws and did a little better (neither of us had ever seen an embryo hook then); but after nearly half an hour's work we gave it up and packed the eggs up with the bigger part of the innocents still in them. We looked at them lovingly as they lay in the box, — as large as duck eggs, but nearly round, two finely specked with brown and the other a dirty white. (Western Red-tails, we found afterwards from that book.) Then we shook hands heartily and started out again.

In ten minutes we saw another nest, and Charley brought down a beautiful set of five Crow's eggs. They were fresh and blew easily, and very soon they were packed and we were off again, happy as larks. After some pretty wet tramping we found another nest and then another, but both were empty, and we were just beginning to realize how wet we were when we found a curiosity. We saw a queer looking thing in a low tree, and making our way over to it found that it was a dead Crow, which was hanging head down, with one foot caught in a little crotch in a branch. The poor thing was very skinny, and had evidently died of starvation there.

After that we unanimously concluded that it was lunch time, and picking out the driest log we could find we sat down. It rained steadily, and we were chilled and wet, but I hardly ever ate a better lunch. And as we ate we talked of the success we had had, and of the morrow at school and the envy of the other boys, till we got warm over the talk and started off eagerly again. After about half an hour we found another Crow's nest and five more eggs. A set for each! We grinned idiotically at each other. Then we came to a thick part of the woods and separated so as to cover the ground thoroughly, walking in parallel lines. Fifteen minutes later I was startled by a resounding yell, "Add, come here!" I went with a rush and found Charley dancing around in front of a low tree covered with grape vine. His eyes were sticking out, and he was brandishing his hatchet wildly at a bunch of sticks in the vines. "Wh-wh-what is that thing," he cried, and as I looked I stared in amazement too, and gave it up. There on the nest was something brown and yellow and black, and over the side nearest us hung what was certainly a flat bird-tail, but staring at us directly over the tail was a queer striped face, with a big pair of hairy ears. The only thing I could think of was a monkey, but monkeys don't have flat tails, and as we jabbered ex-

citedly the beast itself solved the mystery by turning its head squarely the other way and scrambling awkwardly off the nest and flapping into an adjoining tree, where it sat and snapped its beak at us viciously. It was an Owl, an American Long-eared Owl, as we found from the book. The thing had simply been facing the other way when we came up and had turned its head to look at us, and then put up its ears. We had never seen one before — that was all.

Charley was up in the vines in a minute then, and in a minute more was on the ground with five beautiful glassy white eggs. I won't tell you what we did then. It was justifiable anyway. We had come out with fear and trembling after Crow's eggs, and had found not only Crow's but Hawk's and Owl's! It surpassed anything we had ever read of, and we rejoiced accordingly.

They were perfectly fresh and blew easily with tiny holes and were soon packed up and we were off again. That ended the day, though. We tramped till five o'clock as nearly as we could tell from the rain and gathering gloom, and then started for home, aiming to get there for a 6.30 supper. Five miles through the rain we went, with dripping clothes and tired limbs, creating some surprise as we walked through the city streets, but we didn't mind. I wouldn't stop at Charley's, because I wanted to get home and hurrah, and also because I began to think that it was later than we gave it credit for being, and I didn't want to be late for a hot supper. I wasn't.

I got into the house at exactly 2.20, to my intense surprise and disgust. We had been utterly fooled by the darkness of the day and perhaps by our own tired feeling, and I thought with indignation of the root I had fallen over. We could have had two hours more but for that measly watch! But when I got rubbed down and into dry clothes and settled comfortably at the table, with hot coffee and toast which my dear mother stopped her work to prepare, and spread all

my eggs in state on the table in front of me, I concluded that it was all right anyway, and I sat and grinned at mother and told the tale of the day and the noon lunch that we must have eaten before 10.30, and expatiated on the triumph at school on the morrow with a blissful content which only you who have had similar experiences can appreciate.

A. C. Townsend.

Washington.

[I trust that Mr. Townsend will send more of his delightfully written experiences.

—*J. P. A.*]

Nesting of the Brown Pelican.

In 1891 I was spending some months in Florida, and learning of a large rookery of the Brown Pelican, several of us resolved to visit the spot. Accordingly, on February 17, six of us sailed for the island in the yacht "Lida," fully prepared to secure specimens of birds and eggs. I will describe this island as to locality, as there are numerous other breeding grounds in the State. The spot known as Pelican Island is about six miles south of Uricco* on the Indian river, which, as the readers may know, is only a lagoon, but has received the name of river from its long, narrow, shape. This strip of salt water lies along the east coast of the State and is separated from the Atlantic by a long narrow strip of land, which is intersected at wide and irregular intervals by inlets to the sea.

When we came near the island, a low, flat and irregular piece of soil of doubtful formation, at no place above four feet elevation at low tide, the birds rose in great numbers. But it was only when we took the small boat and approached the nests that the scene became impressive. The huge birds raised in vast flocks and with a noise like thunder. They flew about, and mostly settled again in

the water just out of shot-gun range. We variously estimated their numbers. Some placed the number of birds at 10,000, but I feel safe in saying there were easily half that number. We watched their peculiar ways of fishing, which are worthy of study, and I wish you could afford space for a description. Many of the birds, nesting ones probably, flew within range, and fell easily to the guns of the party, and we secured an abundance of specimens, in fact many more than were needed. The writer tried hard to stop the slaughter, but failed miserably; the carnage only ceasing when the ammunition gave out, and the blood-thirsty northern tourists had no further means of butchering. This practice, a most pernicious one, is the direct means of decimating the bird fauna of the South. Nearly all northern tourists think that Florida birds are there for the purpose of gratifying their love of shooting. The result is very great destruction.

There were several hundred nests, all told; mostly built on the ground, sand, generally within a few yards of the water, and often not over six inches above high tide. The nests were of coarse dried grass of different kinds, and when first built appeared to have a nest-form, but in time, especially after the young birds had gained some size, lost all resemblance of a nest and were spread out in a most shiftless manner. A few nests were built in mangroves at the edge of the island, and these were largely composed of twigs for a foundation, but the upper part was as shiftless and dirty as the surface structures in a short time. The island was at the most four acres in extent.

Considering the number of birds, there were very few nests, and my opinion was formed that the frequent incursions on the site by the considerate bird protectors (?) was the direct cause. Many nests contained both eggs and young, while some nests held young two weeks or more old. These big young, covered with down, and, sitting up,

*A little south of 28 degrees north latitude, Brevard County, Fla.

hissing at one from the nests, looked exceedingly grotesque. Many large young sat speechless, from the fact that good-sized fish, head down, filled their mouths and grilles. The protruding tails of the fish were waved in the air as the frightened nestlings swayed about and attempted to disgorge the fish. Although the spines of the dorsal fins presented the wrong way, as the fish are almost always swallowed head first, still not a few did disgorge their last swallowed fish.

The average number of eggs is undoubtedly three, but a few nests contained four, and many nests but two eggs. It was difficult to secure sets of fresh eggs complete, as very often a nest was found to hold fresh and badly incubated eggs, and then again, but rarely, young with fresh eggs. The shell is covered invariably with a thick coating of calcareous matter, and as the eggs are generally stained by lying in the nest, it is only possible to have clean specimens by scraping them or getting freshly laid eggs.

The young for the first few days are naked and most disgusting looking objects. When very young they must be protected from the sun's rays, which are very strong in Florida even in February. At the time of our trip the temperature in the sun was about 90° Fahr. or more. Quite a number of the very young succumbed to the heat while we were there. Although the larger young can swallow a good-sized fish, and we identified five distinct species by dissection and from those disgorged, still the very young are supplied with dessicated fish food, and it is my belief the old ones disgorge the food for them at an early age, after the manner of the Herons.

This rookery has been in existence for years, according to the natives, and was once of much greater extent. The birds must have begun nest building in December and perhaps in November in order to have young of a capacity to swallow a twelve-inch mullet by the middle of February. The birds frequently fly immense distances for their food, and may be seen fishing at most any point

off the shore, where they ride the waves as easily as does a Duck swim on an inland lake. When flying, the birds draws in its head and doubles its neck, and looks, with its long bill, like an enlarged edition of a Woodcock on the wing. As an object to shoot at, it requires no skill whatever, as it can't be missed, and moreover is easily injured.

Of course we secured a good lot of eggs. We were not egg-hogs, but at the same time remembered our friends at the north. Moreover, it was one chance in a lifetime. I attempted the feat of eating a cooked egg, but found it rank, and totally unfit for food. A starving man could eat it, but as for me, I prefer other varieties of egg *vittles*.

We made careful dissections of several specimens and many peculiarities in the animal's economy. In the anatomy, nothing was more remarkable than the joining together of the clavicles with the sternum. In other words, the wish-bone was joined at its apex with the breast-bone into one bone. This gives a remarkable appearance to the skeleton, and is a condition which I have found in no other family of birds.

I stopped one night at a house near the Pelican roost. There was a boy lived there who had visited the island and secured several eggs which were ready to hatch. He was governed in his selection by hearing the young birds *peep* within their shells. The eggs were taken home and deposited in a large vacant room. During the night in March, the temperature being about 90° Fahr., two of the young birds emerged from their shell, and made the night hideous with their discordant, stridulous notes. In the morning we found that one of the young birds had scrambled fully twenty feet from the place where it had hatched.

This instance is recorded as evidence of the effect of heat aside from that afforded by the incubating bird, and to show that young birds, Pelicans at least, can free themselves from the egg shell without assistance.

G. Sirrom.

Nest of the Sharp-shinned Hawk.

This species is rather a rare resident in the vicinity of Listowel or any other part of Ontario that I have visited; and though it is recorded as "abundant" in British Columbia, and as being "partially migratory," yet it did not come under my observations during my passage through, and short residence in, that "sea of mountains." However, every season since I began recording my *avi faunian* observations a few of the species have been noted every season in this vicinity, chiefly in the summer months, and occasionally in the months of February and March. And in my earlier days, in Peel and North Wallace, I had noted it as one of the worst enemies of small birds, wild and tame pigeons, and young domestic fowls. According to my observations, the favorite habitat of this species is thick swamp woods, being but seldom seen in the more open, hardwood timbered lands; though, if it has a nesting home in some neighboring swamp, it often is seen hovering, kite like, over the tree tops, or dashing swiftly across the fields in quest of prey. Again it may be seen, on a mid-summer day, going through the trees of an orchard, seeking for the nests of small birds as a small bird would do in search of insects, and when it has discovered the whereabouts of a flock of young chickens it will revisit the place, day after day, until it has appropriated every individual to its own special use or that of its young, unless the mother hen becomes doubly watchful, or a period is put to its marauding with the contents of a shotgun. Its nesting place is generally in some thickly timbered swampy evergreen wood. Some ten years ago I discovered a nest with four eggs of this species; I afterwards described it in "The Canadian Sportsman and Naturalist." This nest, which was quite a bulky affair and composed wholly of the small dry branches of tamarac, was placed in a cedar tree, about thirty feet off the ground. Since then no other occupied

nest of this bird had been discovered till the summer of 1891, when I became aware that a nest containing the young of this species was situated in a piece of deep swamp near the northeast corner of Wildwood, but being desirous that the birds would return and nest again in the vicinity, I did not disturb them or even go in to see the exact position of the nest.

On the 30th of April, 1892, as I was doing some work near by, and on the alert to catch every sight and sound of bird life that effected my surroundings, the notes of some bird that seemed strange to me came out from the centre of the swamp, and for some time I was at a loss to know what species could be their author. At length a Sharp-shinned Hawk, flying across an open in the wood and uttering similar notes, revealed the mystery of cause and effect. I had made a discovery; these were the love and nesting notes of a female Sharp Shin, and she was about to nest in the same vicinity where I knew that the species had nested the previous summer, so I resolved to watch proceedings; and three or four days after, as the notes still continued to be heard, I went in to investigate. As I approached the place where the hawk was perched, she flew towards and over me, darting out her claws and repeating her *whack, whack, whacks*, and *tweet, tweet, tweets*, in her most wrathful manner, and then flew to a short distance, where she continued to exercise her voice from a higher standpoint.

After considerable search I discovered a large nest in a cedar tree about 20 feet off the ground, to which I climbed up, but found that it was evidently the nest occupied by the Hawk last year; and thinking that it might be again occupied, I left, and a week later returned, and found that no repairing had been done; so I concluded that she must have a new nesting site nearer the place where I first discovered her, and which she still continued to occupy; and after a closer looking into the tops of the neighbor-

ing balsams I espied what I supposed to be the beginning of a new nest; so I left again and did not return till the 23d of May, when, as I saw no Hawk and heard none of her notes, I tapped the tree, and out flushed the bird. The nest still appeared unfinished and light could be seen through it, but as the climb was easy, and only about 16 feet up, I mounted and found that there were three eggs in the nest, which was but a shallow affair, and wholly composed of small dry branches and twigs. Two days after I found that one more egg had been added, so I took the set, and found them very beautiful specimens. The ground color is whitish, with a bluish tint, but each egg is differently marked and blotched with chestnut or amber brown. They are of a spherical shape, being about equal ended, and average about 1.50 by 1.18. For about eight or ten days after both Hawks were noticed in the vicinity, but after the first week of June they disappeared for the season, and I am of the opinion that the species nest but once in the year.

William L. Kells.

Late Nesting of the Bob-white.

In your issue of January, 1892, page 8, are mentioned two late dates of finding the eggs of the Bob-white, Quail, or Virginia Partridge. These dates are given as August 30, 1891, and September 12, 1889, and are referred to as late dates.

About the tenth of November, 1891, Ira Johnson, of Kalamazoo, a most reliable man, found a nest of this species containing twelve eggs. It was situated in a brush pile and gave evidence that it had been deserted.

It may be claimed by doubters of this date that the nest had been deserted a month or two, but this does not seem probable, for the weather had been very cold, and yet the eggs gave no evidence of having been frozen. I think this date the latest yet reported from Michigan, but I doubt not that many hunters in the Union could

give some remarkable records. It is well known that the Quail, or Colin, as it is now called by sticklers, has been found breeding almost every month of the year, and the females have repeatedly been found frozen stiff on their eggs in February and March.

Regarding the above record, it is well known that the opening of the season for Quail, November 1st, had long passed when this nest was found, as Mr. Johnson was hunting Quails at the time and had been out for several days. The eggs had not been incubated, and some made fair specimens.

G. Sirrom.

Kalamazoo, Michigan.

A Home Among the Birds.

The above title is an exact description of my home; situated as it is in the midst of an apple orchard, it is surrounded by birds' nests as well as trees. Within three hundred feet of the house were to be found the following nests, all containing either eggs or young:

- 3 Robins,
- 1 Bluebird,
- 4 Chipping Sparrows,
- 3 Chimney Swift,
- 2 Pewee,
- 4 Least Flycatchers,
- 2 Baltimore Orioles,
- 1 Kingbird,
- 1 Catbird,
- 1 Yellow Warbler,
- 1 Barn Swallow,
- 1 Rough-winged Swallow,
- 1 Red-eyed Vireo, and
- 1 Ruby-throated Hummingbird.

And undoubtedly there are some that have escaped detection. Who of the many readers of the "O. & O." can do better?

S. R. Ingersoll.

Will not our readers send us more articles for publication? Every one can relate something of interest.

THE
ORNITHOLOGIST AND OÖLOGIST

A MONTHLY MAGAZINE OF

NATURAL HISTORY,

ESPECIALLY DEVOTED TO THE STUDY OF

BIRDS,

THEIR NESTS AND EGGS,

AND TO THE

INTERESTS OF NATURALISTS.

Under the Editorial Management of

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Brief Notes, Correspondence, and
Clippings.

Editor of "O. & O."

I have found out something that I think is worth knowing, perhaps,—the cause of the Snowy Owls being so scarce the past winter. A fisherman just arrived from Iceland says the winter has been so mild this year that they have not had a hard frost the whole winter. I am satisfied this is the cause. What do you say? *N. Vickary.*

Editor of "O. & O."

I have a simple and excellent receipt for drying eggs, and if it is not already old to your readers, I would ask that you publish it; for it is by far the best I have ever known. The old way of drying them by absorption on blotting paper oftentimes causes a valuable egg to be broken near the hole, caused by the egg sticking to the paper. Now my way does away with blotting paper, and the art of drying is done perfectly, and instantly. This is my way: After blowing the eggs, and after rinsing them with water, hold them over a hot stove or anything where hot air may touch the egg (hole down); and if you

have never seen it done, I think you will be wonderfully surprised at the rapidity in which the water is forced from the egg, and how soon dried.

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Edwin C. Davis.

Gainesville, Texas.

The question has often been asked, "What do you recommend for a small collecting gun?" In view of giving an answer, we have tried several and find that the X. L. gun is one that we can recommend. We had a 44-calibre chambered for a 45 Winchester shell, and it works to perfection.

But a 12-gauge gun, with one of the collecting tubes, of course is *the gun*—and is an outfit for everything that is required.

"F. B. Webster: Dear Sir,—The ornithological collectors of this country will certainly thank you for the collecting tube you have devised. It is the best and cheapest thing of the kind that I know of. I have thoroughly tested its quality in my Colts' 12-gauge, with results which are of the utmost satisfaction. Success to you.

Oliver Davis.

Columbus, Ohio, May 13, 1893.

Reading I. C. Green's article in March "O. & O." on the breeding of the Duck Hawk on Mt. Tom, I would say that in October, 1892, a farmer brought to me a young Duck Hawk that was shot near Mt. Tom range. I mounted it and now have it in my collection. It is a fine specimen.

J. W. Jackson.

I received on April 20 an Albino Robin. I also heard of an Albino Crow seen at Monson, Mass.

C. K. Reed.

I can report my first set of Wild Turkeys' eggs for 1893,—a set of 12 beauties taken in Stoddard County, Mo., April 27.

Philo W. Smith, Jr.

Several collections of eggs are on exhibition at the World's Fair, Chicago.

American Woodcock.

The American Woodcock is very seldom found in the vicinity of Detroit now, but there are still a few swamps where they can be found. In one of these swamps about three miles from the city I first made my acquaintance with their nest. The swamp was a dense mass of brush and tall weeds on the northern side of Voight's woods. On May 24, 1891, I started out here, hoping to collect a few sets of eggs, with my chum, Harry Allis. We had fair luck and were returning homeward when I started a female Woodcock from nearly under my feet, and there was a nest containing two nearly full-fledged young. The nest was only a slight hollow, lined with fine grass. I hid a short distance off, and soon I heard the old bird chuckle and call to the young, much like the common domestic hen does. The young crept out of the nest, and crept slowly away, hiding under the plants as they went. The next day, May 25, I went out alone to the swamp, and found two other nests containing young; the first had three young who could fly a little, and the second two half-fledged young. I was feeling rather discouraged over the result, although I knew it was very late for them. Going on farther to a denser part of the swamp, I had seated myself on a hillock when I espied a nest containing four eggs in a clump of bushes under a small tree. The nest was composed of dried grass and leaves, and was quite a large structure. The eggs were very handsome, being a creamy buff, dotted with reddish brown, and were a trifle incubated. I felt so elated over my find that I just stood and looked at them for several minutes until my senses came back, and then I packed them carefully in my collecting box. On June 8th I went out again with J. Claire Wood, and we flushed several and Mr. Wood shot two. Since then the swamp has been burnt down and ploughed up. This was my first and only set of eggs. On June 1, 1889, H. Allis and I went collecting in a

dense swamp east of Highland Park. We had a good success, getting a set of four Myrtle Warblers, two Black-billed Cuckoos, Rose-breasted Grosbeaks, etc. I started a Woodcock from a clump of bushes, and she circled around and around the place, and seemed very disinclined to leave. I searched carefully for the nest, but without success, although I am certain one was there. The Woodcock is a very wary bird, and you can seldom surprise them. In fact they usually surprise you by their sudden uprising and the peculiar noise made by their wings. The Woodcock is a summer resident here, arriving the latter part of March and staying till October. They are nocturnal and remain in dense underbrush unless flushed.

B. H. Swales.

Detroit, Michigan.

Breeding Habits of the Ruby-throat at Ballston, New York.

This little gem in feathers arrives from its winter home in Guatemala and Mexico about the 10th of May, the males usually in advance of the females. After devoting about two weeks to rollicking and courtship they proceed to find a suitable location for their nest. In this different members differ very much, some choosing high, open woodlands, others dense thickets, but by far the greater number resort to the orchard near the abode of man, and there, on a horizontal limb at no great distance from the ground, they commence the construction of one of the handsomest of nests, composed of vegetable down and covered with lichens which are held in place by numerous cobwebs. This piece of bird architecture is built by both birds and takes from five to six days to complete. The female then deposits her complement of eggs and incubation begins at once and is the work of the female, the male standing guard, or securing food for his mate. At the end of 8 or 9 days the young are hatched, and then for the next two weeks the parent birds are kept busy from daylight until dark finding food for these hungry mites. At the end of this time they are large enough to leave the nest, and in a few days more are left to shift for themselves. About the first of September they are off for the south, the old ones a few days in advance of the young.

R. S. Ingersoll.

BIRDS' EGGS.

SPECIAL PRICES FOR 1893.

For those not listed, see our regular Catalogue.

POST EXTRA.

A.O.U. Nos.				
3	Horned Grebe	\$0 20	119	Cormorant \$0 15
4	American Eared Grebe	13	120	Double-crested Cormorant 15
5	St. Domingo Grebe	20	120a	Florida Cormorant 20
6	Pied-billed Grebe	6	122	Brandt's Cormorant 25
7	Loon	80	123b	Baird's Cormorant 25
9	Black-throated Loon	75	125	American White Pelican 20
11	Red-throated Loon	50	126	Brown Pelican 15
12	Tufted Puffin	60	128	Man-o'-War Bird 1 00
13	Puffin	12	129	American Merganser 60
27	Black Guillemot	20	130	Red-breasted Merganser 20
29	Pigeon Guillemot	40	132	Mallard 10
30	Murre	12	133	Black Duck 25
30a	California Murre	15	[138]	European Teal 10
31	Brunnich's Murre	15	139	Green-winged Teal 40
31a	Pallas's Murre	40	140	Blue-winged Teal 10
32	Razor-billed Auk	12	141	Cinnamon Teal 15
35	Skua	40	142	Shoveller 20
37	Parasitic Jaeger	35	143	Pintail 24
40	Kittiwake	20	144	Wood Duck 60
42	Glaucous Gull		146	Redhead 15
47	Great Black-backed Gull	25	151	American Golden-eye 60
49	Western Gull	20	152	Barrow's Golden-eye 35
51	Herring Gull	15	154	Old-squaw 25
51a	American Herring Gull	10	155	Harlequin Duck 60
53	California Gull	20	158	Spectacled Eider 2 00
54	Ring-billed Gull	15	159	Greenland Eider 25
[56]	Mew Gull	20	160	American Eider 10
58	Laughing Gull	12	167	Ruddy Duck 30
59	Franklin's Gull	20	169a	Greater Snow Goose 2 00
63	Gull-billed Tern	10	[171]	White-fronted Goose 90
64	Caspian Tern	30	172	Canada Goose 75
65	Royal Tern	20	172a	Hutchin's Goose 75
67	Cabot's Tern	20	177	Black-bellied Tree-duck 1 00
69	Forster's Tern	10	[179]	Whooping Swan 1 00
70	Common Tern	5	182	American Flamingo 50
71	Arctic Tern	5	183	Roseate Spoonbill 60
72	Roseate Tern	12	184	White Ibis 30
74	Least Tern	5	186	Glossy Ibis 30
75	Sooty Tern	15	187	White-faced Glossy Ibis 75
[76]	Bridled Tern	80	188	Wood Ibis 75
77	Black Tern	8	190	American Bittern 75
79	Noddy	20	191	Least Bittern 15
80	Black Skimmer	8	192	Great White Heron 90
86	Fulmar	35	193	Ward's Heron 30
[90]	Manx Shearwater	50	194	Great Blue Heron 20
92	Audubon's Shearwater	1 00	[195]	European Blue Heron 15
104	Stormy Petrel	30	196	American Egret 20
106	Leach's Petrel	15	197	Snowy Heron 15
117	Gannet	25	198	Reddish Egret 25
118	Anhinga	15	199	Louisiana Heron 8
			200	Little Blue Heron 8
			201	Green Heron 8
			202	Black-crowned Night Heron 6
			203	Yellow-crowned Night Heron 15
			207	Limpkin 50
			208	Ling Rail 10
			211	Clapper Rail 10

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—AND—

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No. 6.

Some Prairie Birds.

Years ago, when northwestern Iowa was a vast prairie, out into which few settlers had ventured and the monotony was seldom broken save by some wood-fringed lake or a herder's shanty, I drove to that region about Spirit Lake, Iowa, which is now so well known as a summer resort. My way lay along the Iowa River, from the head waters of which stream, westward, was the great, flat prairie, interspersed with marshes and small lakes, about which swarmed countless numbers of shore birds. Here were troops of White Cranes, some far a-marsh, guarding their nests, Brown Cranes, Canada Geese, fighting each other and whipping the water into foam; Long-billed Curlews; Godwits; Red-bellied Snipes; Golden Plover; Upland Plover; American Bitterns; Ducks of many kinds; Mallard; Pin-tails; Red-heads; Spoon-bill, Blue-winged Teal and occasionally a flock of White Pelicans settled on the shores and waters of a lonely lake; their great white forms glistening brighter than the waters on which they floated. Swans were frequently seen; and Night Herons could be observed moping among the bogs.

The larger number of these species remained during the summer and the naturalist had a wide and interesting field for research. One memorable afternoon in early May I left the tent in kindly shelter of the fringe of woods on Crystal Lake, Winnebago Co., Iowa, the lakelet in whose sparkling waters classic Iowa River finds birth. Following the stream as it wound about through

flat meadows or by low, gravelly hills, I reached the immense marsh lying north from Eagle Lake. Here were secured a number of the large, drab-and-spotted eggs of the White Crane. They had chosen the centre of the marsh for a nesting-place, and there, a mile from the higher shores, the mother birds could be seen upon the nests, which were formed of soft grass gathered together in a firm heap about one and one half feet high, and placed on firm sod, out of water, but very near it. In the top of this heap was a very slight depression for the eggs. Upon these nests the birds sit in the same posture that a goose assumes, the legs protruding behind. They often let the head and neck lie down along the side of the nest in a wearied way, which is usual for the Canada Goose, especially if the hunter is near. Upon my approaching the marsh these birds moved away with stately tread, walking much faster than I cared to do, yet apparently taking it easy. The White Crane is certainly a strikingly handsome bird in its wild retreats. One does not tire of watching their peculiar movements. When walking at a distance they appear almost as tall as a man. They are far more alert and much wilder than the Brown Cranes.

Several sets of Brown Crane's eggs were taken. Their nests being uniformly in the water, formed by tramping rush stalks down until the pile reached the surface, these nests often float about with the mother birds upon them.

So interested had I become that on looking about only a vague, red glow lay close

along the horizon, shadowed by grim, cold clouds; and the night was upon me, seven miles from camp, with many marshes between and not a road nor cow path, alone; too light clad for the night's chill. Casting about for directions and landmarks I began the lonely trip, and long before the dark line of ridges was reached there was utter darkness. Now I had come upon a marsh, hip-deep of water and saw-grass. Through it I waded, fearing to lose the way should I deviate. At length the hills were reached, bestrewn with great boulders, among which was difficult walking, the prairie grass having been burned away by a recent fire. Against one of these great stones I stumbled, when from off its top flew an Eagle, fanning the night wind into my face, and disappearing from directly over me. For a moment could be heard the heavy beating pinions, and then all was still but the ever whistling night wind.

Along this ridge and on and on I wandered, misguided by a red glow sent up against the cloud by a distant prairie fire. Lost! and for a moment the cold chills crept up along my frame and a strong effort was necessary to compose the nerves. Then at length my foot struck a path which led me to the lake, where weary and worn I spent the few remaining hours of that frosty night.

Next day I was wheeling on across the prairies towards Spirit Lake, and the far sweeps of vision from occasional elevations were inspiring. Lying away to the west were the dim flats of Kossuth County. Not a sound, no shrubs for sighing winds; the wheels rolled muffled on the prairie grass. At one point, where the ground lay more rolling and dryer, were many Long-billed Curlews, the males guarding their nests, and, hovering near the wagon, uttering that peculiar mellow whistle so characteristic of the wild, free prairie. Soon I was delighted to see an old Curlew flutter from the horse's feet leaving the four speckled eggs exposed. Further on a mother Curlew led her mottled downy chicks from danger.

Then a Marbled Godwit flew flapping from her nest of chocolate-colored eggs. In this locality a number of prairie wolves strolled leisurely along just out of gunshot. One sneaked away from a newly dug burrow. Now and then a jack rabbit sprung from its "set" to disappear like a spectre. Yellow-legs and Phalarope picked up their meal from the wet meadows; while the flocks of Golden Plover that wheeled about over the burned tracts were the delight of a sportsman. Occasionally were fields of blue anemone.

J. W. Preston.

Baxter, Iowa.

(To be continued.)

Distribution of the Black-Crowned Night Heron in Illinois.

J. E. Dickinson. No. 3.

Summer resident; abundant. Arrive April 5th; leave October. Breeds in colonies in oak groves adjacent to swamps or creeks. Nest placed from 25 to 45 feet high—composed of dead sticks. Sets found from May 10 to early June. Has found nearly hatched young and birds building in same colony on May 27th. Set, 4 to 5; 6 eggs average 2.10 x 1.50; largest, 5.04 x 1.51, smallest, 1.99 x 1.54; color of eggs, blue. Common names, "Qua bird," "Quak," "Shite Poke."

F. A. Gregory. No. 3.

Summer resident. Not common.

Breeds in colonies.

Nests in second growth timber from 2 to 3 feet high, of twigs loosely laid together. Eggs may be seen from below.

Full sets found May 12.

Sets, 3 to 5; 4 average.

Measurements, 2.01 x 1.51, 2.04 x 1.52, 2.00 x 1.50, 2.02 x 1.50. Average, 2.02 x 1.51.

Color, pale bluish green, but are much stained and dirty as incubation advances.

W. E. Pratt. No. 6.

June 30, 4 young.

(As this is his only note of the nesting of this bird in Lake and Cook counties, we may

conclude it is not common as a summer resident.)

L. W. Nichols. No. 10.

Summer resident. Has seen it at all times of the nesting season but has not as yet found a nest.

Dr. A. C. Murchison. No. 16.

Summer resident. Abundant in suitable localities. Breeds in a large colony in the northern part of the county. Nests in a large swamp, placed upon the tops of the marsh grass, which had been bent down until it laid upon the water, covering nearly ten acres. Various composed, green rushes, cat tails, and grass in some, others of twigs and sticks brought from a grove nearly two miles away. From 3 to 10 in. high and 12 to 18 in. diameter, nearly flat, very carelessly put together.

Nest about June 1. (About 120 doz. fresh eggs were taken from this place on this date by an egger.) Set 2 to 4; 3 average; not more than 4 were found in any nest.

Color when fresh is a greenish blue; sometimes quite blue, fading to a lighter shade when exposed to the sun a short time.

A set of 3 measure 2.23 x 1.41, 2.08 x 1.40, 2.36 x 1.43; another 2.21 x 1.53, 2.07 x 1.47, 2.02 x 1.48; a set of 4, 2.05 x 1.47, 2.02 x 1.51, 1.93 x 1.46, 2.02 x 1.48; a set of 3, 2.25 x 1.49, 2.01 x 1.49, 1.87 x 1.40. Average 15 eggs, 2.10 x 1.46; largest 2.36 x 1.43; smallest 1.87 x 1.40.

A. Hamfeldt. No. 18.

Has not met it. Is sure it does not breed in a radius of 20 miles of Ottawa.

R. M. Barnes. No. 25.

Has never met it. Thinks it may be found.

Virginius Chase. No. 25.

Has not found, except as a migrant. (Has been taken in the county on "Spoon River" and "Indian Creek" frequently, but does not breed.—A.C.M.)

W. S. Strobe, M.D. No. 33.

Has not met it.

W. S. Cobleigh. No. 33.

Summer resident. Arrives about the first

week of May; found in small numbers. Not found breeding in 33.

Is found along the Illinois river and marshes.

Sets 3 to 4; eggs measure 2.15 x 1.45. Elliptical, pale bluish-green.

W. E. Loucks. No. 34.

Migrant. Not common; has only found it in the spring. Does not think it breeds.

D. S. Meixsell. No. 36.

Has not met it.

G. C. Pearson. No. 40.

Seen occasionally; was formerly plentiful.

Charles Wells. No. 45.

Has not met it.

W. L. Jones. No. 75.

Summer resident, from April 20 to Sept. 10. Common in the bottom lands and swamps. Nests, but no notes taken.

C. B. Vandercock. No. 77.

Has not found it.

J. C. Elliot. No. 88.

Has not met it.

G. W. Rearden. No. 92.

Not known.

O. Widmann. Old Orchard, Mo.

Migrant. Near St. Louis from April 16 to 29. None later than May 5.

Philo Smith, Jr. St. Louis.

Has no experience with it.

C. P. Fair. Wayland, Mo.

Has never met it.

Burtis Wilson. Davenport, Iowa.

Summer resident; common along streams, and ponds sheltered by woods.

Arrives last of April, leaves first of September. Probably breeds. No good breeding place in vicinity.

"O. & O." July and August, 1884.

"List of Birds collected near St. Louis, Mo.," Julius Hurter.

"Black-Crowned Night Heron, summer sojourner."

Ridgway. "Birds ascertained to breed at Mt. Carmel." Given by E. W. Nelson, in 1875, Bulletin of the Essex Institute.

Black-Crowned Night Heron: Rare.

E. W. Nelson. "Birds of Northeastern Illinois." Bulletin of the Essex Institute, Vol. III., December.

Night Heron: "Common. Owing to its frequenting the almost impenetrable wild rice swamps, this species would be overlooked on a transient visit to their haunts. The first of July, 1874, I saw a few young of the year in the Calumet marshes, but it was not until June, 1876, that I learned anything regarding their habits in this State. The middle of this month, I visited Grass Lake, Lake County, Ill., some miles west of Waukegan. This "lake" is simply a widening of the Fox River, which flows through its centre producing a shallow lake about one mile wide and three miles long. While collecting near a large patch of this wild rice we were surprised to see a number of Night Herons arise from the interior of the patch and commence circling about, uttering hoarse cries. Upon examining the place we were still more surprised to find that the birds were breeding in this improbable location. During this and the following day we examined, within an area of two acres, at least fifty nests of this species. They were all placed in the midst of particularly dense bunches of rice, the stiff, last year's stalks of which, converging slightly near the roots, formed a base for their support. The nests were well built structures, composed of innumerable small pieces of dead rice stalks, varying from two to ten inches in length.

"The nests averaged from ten to fifteen inches in diameter at the top and from ten to thirty in depth. So firmly were they built that I several times stood upon a large nest, to take a more extended view, and did it but little damage. A few contained fresh eggs, and a few had young from one to ten days old, but the majority contained eggs with half-embryos. The parents exhibited great solicitude while we were in the vicinity, but were so cautious that we only succeeded in shooting two."

Robert Kennicott. "Catalogue of Birds

observed in Cook County, Ill." Trans. Ill., State Agric. Soc., 1., 1853-55.

Night Heron: *A. nycticorax*. (No remarks made.)

Robert Ridgway. "Catalogue of Birds of Illinois." Bulletin of the Illinois Museum of Natural History, vol. 1.

Black-Crowned Night Heron: "Resident southward, at least in mild winters; summer sojourner northward. Known as Quak, Qwan Bird, etc."

Everman. "Birds of Carroll Co., Ind."

Night Heron: "Apparently a very rare migrant. On the evening of April 5, 1878, I shot a female in fine plumage at a small pond in Camden."

The Black-Crowned Night Heron seems to be very generally distributed over the State as a summer resident, and very abundant in certain localities where suitable breeding places can be found. It is a winter resident in the southern part of the State, though the greater number winter much further south. The time of arrival is about the first week of April, and departure about the first of October or last of November. It is usually found in abundance wherever it is found during the breeding season, from its habits of nesting in large colonies, but during the nesting season it may travel thirty miles from the nest in search of food, large flocks coming from a swamp over twenty miles away to feed at a lake near this place (Kewanee) every night during the nesting season. So far I have knowledge of but four of these nesting places in the State: one in Winnebago County, one in Lake County, one in Henry and one in Kankakee counties. Two of these are built in trees and two on the grass in a marsh.

The nests, when placed in trees, seem to be very carelessly made; one observer notes that the eggs can be seen from below. When the nests are placed in a marsh they are very substantial affairs, however, and many of them will bear the weight of a man without great damage.

The "town" in Henry County differs somewhat from the one described by Kennicott, as the Herons had broken down the tall marsh grass to the level of the water, over several acres of ground, forming a floor, and on this the nests were placed, over about three feet of water. When the nest is placed in trees, sticks are used in its construction, but almost anything is used in a marsh. Some were composed of sticks carried from a grove about a mile away, others of marsh grass, rushes, wild rice, stalks, etc.

The nests were from three inches to one feet high, nearly flat topped and not well arranged.

How many nests this "town" contained I do not know, but 120 dozen fresh eggs had been taken from it about a week before my visit.

I did not find more than four eggs in any nest and two or three were by far the most common sets.

When fresh the eggs are a beautiful bluish-green, but exposure to the sun bleaches them very rapidly to a very pale bluish, and in a set the first egg laid can readily be distinguished from the eggs laid on the succeeding days by its paler color.

The eggs vary in size from 1.87 x 1.40 to 2.36 x 1.43. However, eggs as broad as 1.53 are sometimes found.

The food consists of almost any kind of worms, shellfish, small fish, etc.

"It is shot in great numbers in Winnebago County on account of its destruction of young game fish."—Dickinson.

A. C. Murchison.

The strangest nesting place of a bird that I have ever seen was one of an English Sparrow, noticed last June. On a crossbar on a telegraph post hangs an old oil can, in the bottom of which is a rust-eaten hole, and through this the Sparrows found an entrance, made their nest, and raised their young without molestation, and undiscovered by any other person, though it was on the side of the railway and near the main street. — *W. L. K.*

My Outfit.

So many articles have already been written about what a collector should encumber himself with, that I may be scoffed at for suggesting the following:—

Nevertheless the only outfit that I have found available, and the one which I use to the exclusion of all others, is that given below. To begin with, over my ordinary underwear I don a medium weight dark-colored woolen shirt. The one I use now is a black and grey check and has two large breast pockets. Next in order comes a pair of woolen pantaloons that are complete with four capacious pockets and a set of belt loops, six in number. It will be found much safer to rivet these on or they will be liable to rip out. The pockets of my pants all have flaps to button down snug and thus prevent possible loss.

For a belt I use one of heavy russet leather with buckle riveted fast like a pistol belt. In fact, the one I am using now is an old holster belt I used on the p'ains.

For shoes I use hand-sewed heavy calf that lace above the ankles and have tops large enough to admit the bottoms of my trousers. By wearing them in this way they answer the purpose of leggins which I avoid as a "delusion and a snare."

An old dilapidated structure, of a doubtful color, with a jagged rim three inches across, answers for a hat, and as a coat I use my fall shooting coat, which I had made of waterproof canvas to button close about my throat.

This coat is a jewel. It is perfection itself. You will understand and admit (?) this when I tell you it originated with myself and was built on my lines. Therefore, I find no fault with the coat.

I don't know how many pockets I had put into this coat, but I do know there are none too many and there is room for no more. It is in these pockets that I carry the rest of my outfit, which consists of jack-knife, compass, matches, and folding drinking-cup.

My collecting boxes are subdivided cigar boxes lined with woolen blanketing. The apartments are then filled with cotton. I also carry some sheets of paper to wrap any birds I may secure, and a small tin box filled with bran. This latter I dust in the eyes and mouth and brush about the vent and the shot wound before plugging with cotton.

As a collecting gun I have used of late years a single barrel, twelve gauge, semi-hammerless. This "swings" just right and I prefer it to my double barrel for collecting purposes. It weighs just seven and a quarter pounds. I generally carry about a dozen shells loaded with "dust" and a few loaded with larger shot.

Last but not least comes the question of lunch. On this subject opinions must vary, and for my part I am willing that they should. When I am to be gone from daybreak until dark I carry a couple of boiled eggs and four slices of buttered bread. This is usually sufficient for my wants, but when it is not I stop at some farmhouse and regale myself on doughnuts and milk. Thus I travel.

Arthur M. Farmer.

Amoskeag, N.H.

An Old-time Outing.

At the time described in the following sketch, the Wild Turkey was still to be found in great numbers in certain parts of Illinois. The Virginia or Red Deer was also at this time to be found, but in greatly reduced numbers. At the present time probably not a dozen Wild Turkeys can be found within a radius of ten miles and the Deer has been extinct for many years. It is with a feeling of regret that the writer recalls the fact that he contributed his mite towards exterminating this noblest of America's game birds. Between the year 1863 and 1875 not less than three hundred Turkeys fell victims to his woodcraft and marksmanship.

Perhaps not even in their palmyest days, could the famous hunting grounds of Ten-

nessee and Kentucky excel those of Central Illinois for their abundance of wild game. A half century ago, the valley of the Illinois river, with its tributaries the Sangamon, Spoon, and Rock rivers, simply teemed with Deer, Turkey and smaller game.

There was one particular locality, to which this article will be confined, that was especially a paradise for the hunter and sportsman. It was called "California Bend," and was formed by the junction of the Spoon with the Illinois river. In the angle formed by these streams grew one of the finest forests in the United States. The trees were principally of the shell-bark hickory and the pecan, along with more or less of the water elm, sycamore, ash and silver-leaved maple. Underneath and in the more open spaces were thickets of persimmon bushes, and around the little lakes the pawpaw, the only representative of the fruits of the tropical south found growing in the northern clime, was also to be found in considerable numbers.

Thompson's Lake, five miles long and one mile in average breadth, bounded this forest on the north.

In the fall of the year the Wild Turkeys would flock to this bottom region and, feasting upon the pecans, wild grapes and the abundance of insect life, would grow very fat.

Many years ago, when yet in his teens, the writer accompanied by his father and a neighbor named Cameron, both famous hunters and dead shots with the rifle, resorted to this "Bend" for a three days hunt. Arriving just at sunset after a drive of twenty miles we camped for the night in close proximity to an immense sycamore, known to many hunters who had visited this region as the "great bee tree." The time was early in November, and the weather was pleasant and the evening balmy. Tents were not so common then as now, but having plenty of blankets and comforters with us, we soon improvised a very satisfactory shelter; fastening a couple of blankets along the top side of a great fallen tree trunk and pegging

the lower side to the ground and stopping up the rear opening with branches of trees, and then, with a great roaring fire in front and a bed of leaves a foot thick to spread our quilts upon, we felt independent of the weather. After supper we retired early, that we might be thoroughly rested and out betimes in the morning for a big day's work. But it was a long while before sleep came to our eyes; the great trees roaring overhead, the hickory nuts rattling down in every direction, the *honk! konk!* of the wild Geese and the more low whispering notes of the Ducks as they wended their way to the lake, and last but not least a serenade by a pair of those strange, ghoulis creatures, the Barred Owl, who never fails to visit a camp-fire in the deep woods, and where two or three of them, by their great variety of notes, would lead a novice to suppose that there was at least a score or more.

We had come prepared to down this great tree, bringing with us two sharp axes, a cross-cut saw, a barrel, buckets, etc., and at day-break in the morning the axes were ringing out merrily on the frosty air. The seniors of the party were skilful axemen and experts in felling trees, and yet it was high noon before the giant sycamore, over six feet in diameter and sound to the centre, came thundering to the ground, bearing with it several smaller trees that grew underneath. In those early days it was an unwritten law among the early settlers that the finder of a bee tree was entitled to the right to cut it and possess the bees and honey. As I remarked before, this tree had been known to contain bees for several years, and more than a dozen different hunters had cut their initials in its smooth bark. Yet on account of its immense size none cared to assume the task of cutting it down. The results amply rewarded us for the labor required to fell the tree. After subduing the bees with smoke, we slabbed off a great section seven or eight feet long from one side of the fallen tree, and the amount of honey

exposed to view greatly surprised us. Slices of well filled comb four feet long by two in depth were taken out. The barrel was filled full of comb and liquid honey dipped up from the cavity of the tree.

Finishing up the bee tree, we ate our dinners, to which the honey was quite a welcomed addition, and at once prepared for an afternoon hunt. The seniors were armed with rifles and the writer with a light double-barreled shot gun. We were to hunt to the north of camp, Cameron to make a detour to the west. My father and I were to hunt together, bearing to the east, and we would rendezvous at the foot of Thompson's lake, distant about two miles.

The Red and Gray Squirrels were barking all about us, but they were too small game for this occasion and did not interest us. A half mile from camp we struck Turkey signs.

The leaves under the pecan trees were freshly scratched up, and evidently they were not far off. From the direction in which the leaves were scratched we soon determined the course in which the flock was travelling, and with guns ready for immediate use we stole along noiselessly in pursuit, with ears strained to catch the first sound, and eyes seeing everything that stirred in the thickets.

Directly *quilt! quilt!* some distance in our front warned us that we were up to them and were discovered, but almost simultaneously with the first warning notes of the rear guard, leader of the flock, my father's rifle leaped to his shoulder and rang out sharp and clear. The Turkeys flew and ran in every direction, but two or three knowing in which way the danger lay. One fine young gobbler, alighting in a tree off to the left, had scarcely folded his wings till he tumbled to the ground at the crack of my gun.

My father's shot had also been effective, and picking up the two Turkeys we secreted ourselves between the trunks of a large double soft maple tree, that some tempest had torn up by the roots and blown to the ground. For about fifteen minutes everything was as

still as the grave. Then away off among the trees to the east of us, came the call note of the Turkey, *ccouk, ccouk*, at first indistinct and low, and then louder and with more confidence. Producing a caller, made from the smaller bone of the first wing joint of the Turkey, my father placed it to his mouth and produced so good an imitation of the call notes of the Wild Turkey that an old hunter could not have told the difference. The call notes were now heard on all sides of us, and we could hear the Turkeys getting down out of the trees in every direction. In a short time we could hear them cautiously approaching the place where we lay concealed and after a few minutes of intense waiting and watching several appeared in view, but the distance was too great yet for a sure shot. My father signed to me to hug the ground, and again his caller rang out *ccouk, ccouk, ccouk*.

They now approached more rapidly, and were soon at close enough quarters. Slowly and cautiously getting the ends of our guns over the log in our front, at once followed by just enough of our heads, with hats removed, to glance along the barrels, our guns spoke at once, and two more Turkeys were writhing and flapping in death's agony upon the ground.

Again everything was quiet, and piling up our dead Turkeys we decided on a still hunt, each fellow for himself. Separating, we went in different directions, and although I flushed several Turkeys from the dense underbrush, they were too quick for me, and got away without injury. Hunting about for nearly an hour without success, I was about to give up the quest and return to our dead game, when a shot a quarter of a mile away rang through the woods, and in a few minutes afterwards three Turkeys lit down in an open space of the woods a hundred yards away. Concealing myself behind a tree I waited till they came within about sixty yards of me, and then gave them both barrels at once. Two of them again took to wing, but one remained flopping upon the ground. In a

short time my father came up; he had also secured another one. This made six out of the flock, which we estimated at about twenty. We had several times heard the report of Cameron's gun, but could only conjecture in regard to what he was shooting. He now, however, put in an appearance, his eyes shining and his whole demeanor indicating excitement. He carried in one hand a Mallard Duck, and his first words were, "I got him."

"Got what?" we interrogated, glancing rather contemptuously at his Duck.

"The finest Buck in the Illinois bottom," he said.

Gathering up our Turkeys we accompanied him to his game, about half a mile away. It was indeed a fine Buck, with great beautiful antlers. He was shot squarely through the body just behind the shoulders and had made only a few jumps before he fell dead. Hanging our game up to limbs of trees, we decided to go to camp, load up everything, and drive to the game, load it in the wagon, and then go on to the foot of the lake and camp for the night. This we did, selecting our camping place just as the sun was going down. We were back in the timber about 200 yards from the edge of the lake, but could see glimpses of the water glistening through the trees. The noise and fuss of the water fowl we could plainly hear. Going out where we could have an unobstructed view we were surprised at the great numbers of water fowl.

There were simply square acres of the lake's surface, covered with Ducks, Geese and Brant. Lower down and at the water's edge on the opposite side there was a little flock of a half dozen Pelicans. They loomed up so large in the reflection of the setting sun that they appeared like small white boats, floating on the lake.

The seniors of the party determined to try for a shot at them. Slipping back to the woods they went down the lake until they got a large log lying near the water, between them and the Pelicans.

Dropping down on their hands and feet, they crawled to this shelter, and then, lying on their stomachs, took a long and careful aim at the great birds.

At the crack of their rifles all the birds arose on the wing except one, whose head fell forward in the water, and after swimming about in a circle for a few seconds, lay still in death.

The report of the guns, as it reverberated over the water, caused thousands of Ducks and Geese to take to wing; the air was black in every direction with great circling flocks. Dropping down in the thick flag my opportunity soon came, and as a big flock of Mallards came circling over me I arose to my feet, and bang! bang! each report followed by a Duck tumbling headlong to the earth. When the Pelican was obtained it was found to be shot through the body at the butt of the wings. It was a wonderful shot; the distance was greater than 200 yards. Each party claimed that it was the other that killed the Pelican, and to this day (they are both yet living, very aged) they will have it that way.

It was now night, and we busied ourselves cooking supper, of which venison steak formed a part, dressing the game, which consisted in removing the entrails of the fowls killed and putting a handful of salt on the inside.

The Deer was half skinned, and treated in the same manner. By the time supper was over and the camp for the night made comfortable, we were ready for something else. An outing to this famous region was never considered complete without a Coon hunt.

We had provided for this sport by bringing with us two good dogs, somewhat noted for their skill in hunting the Tree Fox. So far we had kept them chained in camp, partly to guard it and partly because, if allowed to go with us when hunting Deer and Turkey, they would be all the time treeing Squirrels, and would frighten away the larger game by their noise.

We were now ready for a Coon hunt, and the two dogs were more anxious to be off than we were.

Going around to the north side of the lake where the fishermen had been hauling their great seines we rightly supposed the Racoons would be allured to this side, to feed upon the refuse fish that lay along the shore. We had scarcely gotten well upon good Coon ground till the dogs announced something treed. A few minutes work with our axes on the leaning, soft maple brought it crashing to the ground, and a minute after a terrible battle was going on between our dogs and a large Coon; but our canines were experts in this kind of business and soon had put a quietus on Mr. *Procyon lotor*. Suffice it to say that we returned to camp, after tramping four or five miles, bearing with us three large and fat Coons. We were thoroughly tired after our day's work, but so well pleased with its results that we scarcely thought of the fatigue.

As we crawled into our bunks the wind was whistling and moaning through the trees, the sky was overcast with threatening clouds, and the weather was growing colder every minute. Winter was evidently going to break in upon us, and sure enough at day-break next morning it came with a regular blizzard,—snow, rain and sleet all mixed up together.

We had intended staying over another day. At daybreak the seniors of the party started to do up some more of the Turkeys, while I was left to guard camp and shoot Ducks, and shoot them I did; they were flying through the air so fast that, after killing about a dozen, I desisted, deeming it useless to slaughter so many; besides I had hard work to keep my fingers from freezing in loading and handling the cold gun.

In an hour or two the Turkey hunters came back, having killed but one, which fell to Cameron's gun. They announced that hunting in such a storm was no good, and after a council we all decided that home was

the best place for us. We at once hitched up and decamped, and in spite of the blizzard which we had to face, we were as merry a little party as ever came to the "California Bend." What a paradise to the hunter and naturalist was this region in those days.

What a change has come over it now. This fall, in October, I visited it again. The great forest of hickory and pecan is nearly all cut away.

Immense fields of corn were waving where once the wild denizens of the woods had full sway. Two railroads ran through "California Bend."

Not much is left of its original wild splendor. The lake is still there, teeming with thousands of fish, and the water fowl still come, but in greatly reduced numbers.

W. S. Strode, M. D.

Lewiston, Ill.

Nesting of Gambel's Quail in the Colorado Desert.

Gambel's Partridge (*callipepla gambeli*) is one of the very few game birds which inhabit the desert exclusively, and for this reason they are not likely to become exterminated for a long time, as is the case with many others, for there are few sportsmen, however ardent, who care to take a hunting trip over the scorching sands of the desert, when game equally palatable is to be found at their very doors.

It was my good fortune to take a trip over the Colorado Desert this spring, and for the first time in my life I saw the beautiful Gambel's Quail at home.

Starting from Julian, San Diego Co., California, we descended the east side of the mountains, and after a day's travel found ourselves on the edge of the desert. From here we traveled for three days over rocky and sandy roads and trails, until we arrived at Fish Springs, not far from the edge of the great Salton Sea, which caused so much anxiety two years ago by threatening to, and in fact it did, overflow its banks, and cover the

tracks of the Southern Pacific R.R. and endanger the works of the salt company at Salton. The spring is a circular hole about thirty feet across and of unknown depth, the usual story of a bottomless pit being applied to it. It receives its name from the fact that in it live numbers of tiny fish from one to two inches long. The water is rather alkaline and impregnated with sulphur.

The next day we entered the Mesquites, and here, for the first time, met the object of our search, Gambel's Quail.

We were first made conscious of the bird's presence by hearing its familiar call. I say familiar, for it is very similar to that of the Valley Partridge, so common about home.

I made off in the direction of the sound, and soon saw a pair of the birds run into a thick Mesquite bush. Any one who is familiar with a Mesquite thicket will know why I did not follow. For the sake of those who are unacquainted with the plant, I would say that going through them is much like going through a thicket of briars with thorns an inch long, and thorns that will not bend or break either. They come as near being like a thicket of thorny locust trees as anything else I can think of. Well, I decided to go around that Mesquite bush, and did so just in time to see one of the birds dive into the next. I fired at its retreating form, and was gratified at hearing a heavy fluttering under the brush. By crawling on hands and knees, I succeeded in pulling it out, a fine male. Soon afterward I killed a female, which, upon skinning, was found to contain a well-developed egg. During the afternoon I succeeded in taking two specimens of Phainopepla (*Phainopepla uetus*).

That night we camped at Agua Dulce (Spanish words meaning "Sweet Water"). I do not know why it is so called, for the water is only a little less salty and sulphury than the other watering places on the desert.

As I was starting out, just at sundown, in search of a suitable place to set my traps, for I was collecting both birds and mammals,

I flushed a bird from beneath a small bush about a foot high.

Examination revealed a depression in the ground in which rested eight creamy white eggs, blotched with brown and lilac. I left them undisturbed, hoping to find a full set and get the parent bird on my return. Two days later, when I again visited the spot, the eggs were as I left them and the parent nowhere in sight, so I was forced to take the incomplete set. This was on April 5, which I think is about the proper date to look for eggs of this species.

At Walter's station, on the Southern Pacific R.R., I found Gambel's Quail quite plentiful and succeeded in taking four more specimens, which, with some taken on the home trip, made a total of nine skins, and one incomplete set of eggs the result of the trip.

Gambel's Quail is slightly smaller than the Valley Quail (*callipepla californica vallicola*), with a brown crown instead of the ashen gray of the latter. On the breast is a heavy smoky patch which takes the place of the beautifully mottled breast of the Valley species. The whole tone of the bird is lighter, the plume being nearly jet black. The species ranges in this State as far north as San Geronimo Pass, where it hybridizes with the Valley Partridge. It also extends through Arizona and New Mexico, but always is found in the vicinity of water. Generally it is shyer than the Valley Quail, but I consider a week's trip after them worth a month's with the latter.

Fred. W. Koch.

Twin Oaks, California.

J. Parker Norris has added to his cabinet a fine set of four eggs of the Duck Hawk, taken on Mount Tom, Mass., on May 6, 1893, by H. W. Smith. They are beautiful specimens.

The Condor, when rising from the earth, always describes circles in the air, and can rise in no other way.

Malformations in Birds.

Numerous instances of malformations in birds and mammals have been brought to my notice, but I have never seen a case, aside from this one, in which the capacity of the mouth was curtailed in the slightest degree. We are all familiar with the gaping mouths of young birds in the nest, and it would seem to an observer that the chief aim of these nestlings was to open the beak to the widest extent and engulf the food brought to them by the old birds. Yet if one will but recall the manner of feeding the young in the case of the common Turtle Dove, passenger Pigeon and domestic Pigeon, it will be quickly seen that a wide distension of the mandibles is not always necessary. The young of these species secure its sustenance from the crop of the parent birds. The food taken by the old birds is macerated and mixed with a milky substance, and is then regurgitated into the mouth of the nestling, as all have observed. This peculiar process gives rise to the not inapt term "sucking doves."

One day when hunting for specimens in the month of June I saw two Turtle or Mourning Doves, evidently a pair, feeding in a field, and quickly detected a marked peculiarity in the manner of one of them. The oddity would not pick up its food in the usual manner of Doves, but invariably dropped its head on the right side and seemed to scoop up the substance. After watching it for a time, I shot it. It was a healthy, well-nourished female, and had recently been setting, as absence of abdominal feathers proved, and at the time had young undoubtedly, as indicated by the condition of the crop.

The whole left side of its bill was closed by a tenacious yet elastic tissue which held the mandibles together. This tissue also covered the tip of the bill and extended three sixteenths of an inch back from the tip on the right side. On the left side there

was but slight enlargement at any part, but the region about the nostril was somewhat corrugated. On the right side the imperfect mandibles were exceedingly delicate and slender, and more resembled the squab bill than that of an adult bird. The opening to the mouth was over five eighths of an inch in length, and could be spread by a little pressure to slightly over one fourth of an inch, though it may be doubted if the bird could distend it to this width. Nature, which had so oddly formed this bill, had evidently endeavored to make amends for the deformity by giving great mobility to the parts.

It is singular that a bird in this condition should have reached maturity, but it is most remarkable that it should rear young. One point is evident to all; no species outside of the Pigeon family could receive or furnish nourishment when in this condition.

Morris Gibbs, M.D.

Kalamazoo, Michigan.

A Few Facts about the Turkey Buzzard.

During the last two months I have been travelling through the Southern Atlantic States; and being fortunate in having my own private car, I was better able to learn the following facts about the Turkey Buzzard.

For fear some may think me negligent in not giving the Latin name of this bird, I will freely confess that my knowledge of Cæsar's language is confined to that gentleman's first three books, and I do not think that the Turkey Buzzard is mentioned therein.

The Buzzard is justly named the scavenger, and it was only a few years ago these birds ridded the Washington market of much of its garbage.

The first noticeable characteristic is the flight. The wings are seldom flapped, the bird soaring for long intervals with scarcely any exertion. It often seemed as if it would fall sideways over on its back as it gracefully swayed one way and then another. As it swayed from side to side away up in the sky,

it strongly reminded me of a ship rolling in a heavy swell. Its powers for making headway in a wind are not great, and it is compelled to beat one way and then another in order to make any progress. I once noticed one on a windy day crossing a small field, and where many other birds would have quickly vanished it took the Buzzard a long time to cover two hundred yards. It is forced to run some distance before being able to rise from the ground. On the ground it is extremely awkward.

They are easy of approach when gorged, and hesitate to leave their food; sometimes, however, I have been unable to get near them. I have seen many carcasses from which odors of all degrees emanated, but which had been left untouched by the Buzzards; this I cannot account for. When any offal is discovered by one of these birds, it soars high above, sinking gradually; their eyesight must be powerful, as hundreds will soon see the lucky one and gather around to partake. The eyes of any dead animal seem to be the favorite morsel, as they are always the first to be picked out.

R. H. White, Jr.

Chestnut Hill, Mass.

Nesting Habits of the Great Horned Owl.

It appears to be generally believed by ornithologists and oologists that the Great Horned Owl will occupy the same nest for a number of years, even after being frequently molested. Although my experience is somewhat limited, owing to the scarcity of that specie in this locality, as only five nests have come under my observation, it does not establish the fact to the contrary, and yet it has been my misfortune in every case to find it otherwise.

My first was an open nest in a large beech tree, and contained three young Owls when found. They were left in the nest to mature unmolested, with the hopes of collecting a set of eggs there the following season. The

next spring I visited the nest frequently, but no owls appeared in that locality.

My second was an open nest in a beech tree and contained two young Owls, about half grown when found. They were allowed to mature in the nest unmolested, and in the following spring the nest was unoccupied.

The third and fourth were both open nests and found by Albert and Elmer Durfee.

From one of these nests they took a set of three eggs and the other contained young birds, which were left in the nest undisturbed.

I visited both of these nests the following spring and found them unoccupied, and no Owls could be seen in the woods.

The fifth nest was found by myself, situated in a hole in the side of a basswood tree, from which I took a set of two fresh eggs on March 20, 1892; and up to the present date, March 24, 1893, there is no appearance of the Great Horned Owl occupying the same cavity this spring.

I should like to hear from other collectors with more extended experience on this subject, so that we might be able to ascertain what proportion of Great Horned Owls' nests found, have been occupied the following season.

James B. Purdy.

Plymouth, Michigan.

Notes on Arkansas Flycatchers in Towner County, North Dakota.

Last season I took notes of two nests of the Arkansas Flycatcher. It was the first in my three years' collecting here that this species was noted, and the fact of their nesting here the same year added a double interest to me. The first time I saw them was June 12, and my attention was attracted by their cries, and it is a peculiar cry they have, too; once heard, not easily forgotten. This pair was seen and heard nearly every day, and we noted them looking in all sorts of places for a spot to build, which they finally did the last of the month. The site they finally selected was on an old binder that stood within ten rods of the school-house

where from twenty to thirty children were playing every day.

The nest and eggs were taken July 5, by E. S. Bryant, of Phoenix, N.Y., who was collecting here at the time. The nest contained three eggs, which were fresh. The set was not complete, or at least I did not think so, but Mr. B. was to leave for home the next day and he wanted them. This pair of birds left and did not return to the vicinity again.

I took the other set July 16. The nest was placed on a part of the wind-mill pump at the railroad station and was within reach of my hand from the ground. The nest was bulky and composed of various materials, this set was complete, four eggs; incubation one half or more. This nest was seen by Mr. B. just before he left and we thought that it was the same pair of birds building a second nest. I did not go near them, with one exception, until I went to get the eggs, as I did not wish to call any attention to them. From the closeness of the dates of the two sets of eggs, there must have been two pair of birds when we had noticed but one.

It seems strange that these birds should have chosen such exposed places when they are usually credited with being very shy.

Several pair were seen on the shores of Devil's Lake, but none were seen at Turtle Mountain during the season.

In January issue of "O. & O." Mr. James B. Purdy writes of the breeding of the Canada Geese in captivity as something rather unusual. I know of several flocks here. I have seen one goose raise two broods. The first year, 1891, she laid and hatched four eggs and raised them to maturity. She was then three years old. Last season the same goose laid twelve eggs; eleven hatched, one egg was unfertile. Ten goslings were raised and are now alive. They run out in all kinds of weather, but are protected nights and have plenty of care. Can give fuller particulars if required.

Elmer F. Judd.

THE
ORNITHOLOGIST & ZOOLOGIST
 A MONTHLY MAGAZINE OF
NATURAL HISTORY,
 ESPECIALLY DEVOTED TO THE STUDY OF
BIRDS,
 THEIR NESTS AND EGGS,
 AND TO THE
INTERESTS OF NATURALISTS.

Under the Editorial Management of
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 If you fail to receive it, notify us.

Editor of "O. & O.":

I have tried your new auxiliary barrel, and found it exceeded my highest expectations for shooting. It throws dust shot with force enough to kill large birds at seventy-five feet, and does not shoot small birds to pieces. I also find it a great saving in ammunition.

H. L. Monleux.

Fresno, Cal.

I took a fine specimen of Richardson's Owl the 20th of February, the first I have ever seen here, although I have heard of such an Owl being seen.

Other bird life consisting of flocks of Snow Flakes, now and then a White Owl and a few Sharp-tail Grouse. *Elmer T. Judd.*

Finds.

March 25, Great Horned Owl, 3 eggs, in white oak; April 9, Crow, 5 eggs, in soft maple; April 9, White-rumped Shrike, 3 eggs, in osage; April 12, Crow, 5 eggs.

Carl Fritz-Henning.

Boone, Iowa.

Please send us notes of your collecting trips. They will be welcome.

An American Egret was shot by E. W. Champlin, in cedar swamp, Ocean View, R.I., first of June. *C. G. Dunn.*

We received in March a Pig. It had 1 head, 4 ears, 2 bodies, 8 legs—a perfect darling. *C. K. Reed.*

Worcester, Mass.

Editor of "O. & O.":

This morning I took down the key to my "museum," which has been closed since November, when I finished arranging the results of my summer's collecting. I opened up the room, dusted out, looked to my nests and eggs to see if they were all right, and examined my bird skins to see that none were spoiled. Then I got down my notebook and journal and started to look over them. Before I had got very far, I remembered that it had been some time since I had written to the "O. & O.," so I picked up a few sheets of paper and commenced looking for items of interest.

I did not do much collecting last season. To commence with, I sprained my ankle just about the time the birds commenced laying, and was only able to do a little collecting around the cemeteries.

April 17, as I was going along one of our principal streets, a bird came fluttering down on top of my head. I was rather surprised on looking down to behold a Least Bittern. As it was flying over it had struck one of the tall buildings. This is a rare bird for this vicinity, this being the only one I ever found, or rather the only one that ever found me.

June 17, found a Blue-gray Gnatcatcher's nest about two miles south of the city. It was in the crotch of a young oak tree about 10 feet from the ground. It contained young.

I found eight nests of Goldfinch, only one contained eggs, however. This is the largest number ever found by me in one season.

December 9, saw a Chipping Sparrow in a tree in the park. *W. E. Mulliken.*

Grand Rapids, Mich.

Poor Datas.

I have got just a few words I want to say in relation to this important subject, and this time it is not the young collector as much as the older one that is at fault. My experience has been that the men that have had the most experience write the poorest datas.

I have during the last few seasons (and probably a lot of my brother collectors can sympathize with me) received datas from quite a number of the different States, and I tell you they are a curiosity in themselves. Some of them would puzzle a lawyer to tell what *State* the nest was found in, to say nothing of getting any nearer to the bird's place of abode.

Now, gentlemen, do not think because *you* are familiar with the names of your different lakes, ponds, flats, different kinds of trees, bushes, etc., that every other collector in the wide world is also.

Now here is one before me, written for a set of American Coot. Yes, I guess they were taken in California, I can make that out, but that is as near as I can get to it. Now California is quite a large State, and sometimes it would be a great convenience to know whether they were taken in the northern or southern part.

Here is another one written for a set of White-rumped Shrike. There is no number on it, no set mark, and when they come to the most important part of the data (the description of the nest), they write, as large as life: "Nest in a shade tree accompanying eggs."

Now that collector forgets that we were not with him when that set was taken. We do not know whether it was in a birch or a pine tree, whether it was in the heart of a great city or in some wild barren woods; whether it was six feet high or sixty, and it would be hard to tell whether the nest or the tree went with the set; but as the tree was not sent, I suppose it meant the nest.

Now all of this trouble could be easily avoided by a little care. Do not write a data so that whoever receives it has got to guess at the larger part of it. Take time. Write them plainly. Give all the details in regard to the nest that the data will allow, and I feel satisfied that you will receive the blessing of every collector that has any dealings with you.

Charles S. Butters.

Haverhill, Mass.

Large Eggs of the Field Sparrow.

In reviewing some back volumes of the "O. & O.," I noticed the article in November number, 1888, "Remarkable eggs of the Field Sparrow," by Mr. J. P. Norris, in which he records an unusually large egg, measuring .79 x .55. It is one of a set of three, the others being of normal size.

I have in my collection a still larger set, both in size and number, it being a set of five collected by me June 9, 1884. All of the eggs in this set are abnormally large, measuring as follows: .81 x .55; .80 x .54; .80 x .53; .77 x .51; .75 x .51. The nest was built in a hazelnut bush, two feet from the ground, in a bushy pasture.

To illustrate the great variation in size and shape of the eggs of this species I will give the measurements of a set of four collected May 26, 1891, the nest just raised from off the ground in a bunch of goldenrod: .62 x .52; .63 x .52; .64 x .50; .67 x .52.

This is one of our most common birds in the breeding season, and displays as much variation in the situation of the nest as in their eggs. I have found them on the ground under a small bush or bunch of weeds, barely raised from the ground in a tussock of grass or small bush; also to the height of five feet in a bush or brier. I remember one nest built in a bush under a large tree in a heavy piece of woodland, but they are generally situated in a scrubby, bushy field.

G. L. H.

Bethel, Conn.

BIRDS' EGGS.

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POSTAGE MUST BE ADDED.

The average postage on a cigar box of Eggs is 16 cents.

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3	Horned Grebe	\$0 20	139	Green-winged Teal	40
4	American Eared Grebe	13	140	Blue-winged Teal	10
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6	Pied-billed Grebe	6	142	Shoveller	20
7	Loon	80	143	Pintail	24
9	Black-throated Loon	75	144	Wood Duck	60
11	Red-throated Loon	50	146	Redhead	15
12	Tufted Puffin	50	151	American Golden-eye	60
13	Puffin	12	152	Barrow's Golden-eye	35
27	Black Guillemot	20	154	Old-squaw	25
29	Pigeon Guillemot	40	155	Harlequin Duck	60
30	Murre	12	159	Greenland Eider	25
30a	California Murre	15	160	American Eider	10
31	Brunnich's Murre	15	167	Ruddy Duck	30
31a	Pallas's Murre	40	169a	Greater Snow Goose	2 00
32	Razor-billed Auk	12	[171]	White-fronted Goose	90
35	Skua	40	172	Canada Goose	75
37	Parasitic Jaeger	35	172a	Hutchin's Goose	75
40	Kittiwake	20	177	Black-bellied Tree-duck	1 00
42	Glaucous Gull	60	[179]	Whooping Swan	1 00
47	Great Black-backed Gull	25	182	American Flamingo	50
49	Western Gull	20	183	Roseate Spoonbill	60
51	Herring Gull	15	184	White Ibis	30
51a	American Herring Gull	10	186	Glossy Ibis	30
53	California Gull	15	187	White-faced Glossy Ibis	75
54	Ring-billed Gull	15	188	Wood Ibis	75
[56]	Mew Gull	15	190	American Bittern	40
58	Laughing Gull	12	191	Least Bittern	15
59	Franklin's Gull	20	192	Great White Heron	90
63	Gull-billed Tern	10	193	Ward's Heron	30
64	Caspian Tern	30	194	Great Blue Heron	15
65	Royal Tern	20	[195]	European Blue Heron	15
67	Cabot's Tern	18	196	American Egret	20
69	Forster's Tern	10	197	Snowy Heron	15
70	Common Tern	5	198	Reddish Egret	25
71	Arctic Tern	5	199	Louisiana Heron	8
72	Roseate Tern	12	200	Little Blue Heron	8
74	Least Tern	5	201	Green Heron	8
75	Sooty Tern	15	202	Black-crowned Night Heron	6
[76]	Bridled Tern	75	203	Yellow-crowned Night Heron	15
77	Black Tern	8	207	Limpkin	50
79	Noddy	18	208	King Rail	10
80	Black Skimmer	8	211	Clapper Rail	10
86	Fulmar	30	212	Virginia Rail	10
[90]	Manx Shearwater	40	[213]	Spotted Crane	15
92	Audubon's Shearwater	75	214	Sora	5
104	Stormy Petrel	30	[217]	Corn Crane	10
106	Leach's Petrel	15	218	Purple Gallinule	20
117	Gannet	25	219	Florida Gallinule	5
118	Anhinga	15	[220]	European Coot	10
119	Cormorant	15	221	American Coot	5
120	Double-crested Cormorant	15	223	Northern Phalarope	35
120a	Florida Cormorant	20	224	Wilson's Phalarope	60
122	Brandt's Cormorant	25	225	American Avocet	50
123b	Baird's Cormorant	25	226	Black-necked Stilt	45
125	American White Pelican	20	228	American Woodcock	75
126	Brown Pelican	15	[229]	European Snipe	18
128	Man-o'-War Bird	80	230	Wilson's Snipe	1 00
129	American Merganser	60	[243]	Dunlin	25
130	Red-breasted Merganser	20	249	Marbled Godwit	
132	Mallard	10	252	Black-tailed Godwit	
133	Black Duck	25	[258]	Willet	
[138]	European Teal	8	[260]	Ruff	12
			261	Bartramian Sandpiper	25

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No. 7.

Canadian Eagle.

It was during the recent winter that, being in Montreal, Canada, I had the good fortune of acquiring from the dean of a medical institution a grand specimen of the Golden Eagle (*Aquila Chrysaetos*).

The facts of the procural of this Eagle are the following: It was shot on Montagne Rougemont (Johnson Mountain) in a sugar bush owned by the above dean and operated by his habitant or farmer.

This mountain is situated at a distance of 36 miles from Montreal and 3 miles from St. Cesaire, Rouville County, P.Q. Johnson Mountain is a bold, rugged, wooded eminence rising to a height of perhaps two thousand feet. It, however, seems higher on account of its being almost solitary amongst vast level stretches of farms, for which this section is noted and which extend miles in all directions.

But to continue. This eagle was shot the 18th of March, 1893. I received it frozen and mounted it a few days afterwards.

I here append a few measurements which I took after the thawing out of the bird. They were taken as carefully as possible, from the sole fact, as you perhaps know, that Eastern specimens of the Golden Eagle are few and far between:

Sex, female; weight, 10 lbs. 14 oz.; extent, 84 inches (7 feet); wing, 27 inches; length (beak to tip of tail), 35½ inches; length (beak to end of claw), 34 inches; tail, 15 inches; thigh, 7½ inches; tarsus, 5 inches;

toe (middle,) 2⅜ inches; toe (hind) 1⅝ inches; claw (inner), 2¼ inches; claw (hind), 2⅞ inches; mandible (upper, with cere), 3 inches.

One can judge of the strength of such a bird when the tape, stretched around its thigh, indicates 7 inches, and around its head nine inches; whereas the girth of the body around closed wings measures 27 inches.

It is on close examination that you perceive just how those long, bear-like claws and powerful mandibles, combined with a powerful thick muscled raptorial body, and lastly that immense stretch of wings, can with ease make a Hare give its last squeak; a Grouse whirr for the last time; a stray Lamb carried exultingly upward; and, as history sometimes tells us, a child left by its mother flown away with and devoured at leisure.

The weight of a large Bald Eagle, of which I have measurements, was but 9 pounds; though in extent, with tape stretched across its wings, gave the grand spread of 7 feet 4 inches.

That Golden Eagles have for years past been breeding on this Canadian mountain, I doubt not, for on many a rocky crag could their eyries have been built and they have reared their young in safety from man; for rarely are those crags inspected, if ever, by enterprising oologists or even ornithologists. Even that highly educated dean didn't know whether it was a large Hawk or an immature Bald Eagle! But the feathered tarsus plainly revealed its identity. *Albert M. Roberts.*

Holyoke, Mass.

Spring Notes from Philadelphia.

Unfortunately, I have not had enough leisure to make observations on the migration every day, but have been tied down to a few days each week.

I noted the first Robins and Grackles in any numbers on March 12. Song Sparrows came about the same time, and immense flocks of them could be found among the willows in the meadows. On March 27th a few stray Warblers showed up, chiefly Yellow-rumps. The Woodpeckers and Flycatchers came at about the same time. By April 1st the Tree and Fox Sparrows had all left, and I think the Juncos and White-throat Sparrows left about the same time. I was away for two weeks then, and had to trust to hearsay. By April 21st the Warblers were coming in numbers, they being Yellow-rumps, Yellow Red-poles, Black-throated Blue and Black-throated Green.

May 1st I was out all the afternoon in woods and fields, and saw, besides the above many ♂ Maryland Yellow-throats and Black-white Creepers.

May 3d I was out again, and saw many ♀ Maryland Yellow-throats, and fewer ♂'s.

On May 1st I saw no ♀, which seems to mean that the sexes migrate separately.

May 7th I saw many Wood and Brown Thrushes, and many pairs of Oven-birds.

May 9th I walked along the bank of the Schuylkill in Fairmount Park, and had a most delightful afternoon. It was quite warm, and with very little breeze. The sun was bright and the air full of the scent of flowers. Birds were singing all around, but I recognized very few of the songs. Among those I knew, that of the Catbird was prominent. I saw one sitting on a grapevine, singing away for all he was worth. I stole up near him, and began to squeak and whistle in a manner that would have frightened any other bird, but it only angered him. He turned towards me, and tried to drown me out with his song, and when I stopped, gave several

curious notes, probably of triumph at silencing a rival. One in particular was very curious, quite different from anything I have ever heard before. It was a quick, low *cattyhunkerhunk* in a hoarse, tremulous tone. While I was looking around for more birds, I heard a song that I've often heard before and never traced. I worked hard over this one, stealing right under the tree whence it came. It was a loud, clear *wish-enew* thrice repeated, making the woods ring. I swept the trees with my glasses, but no bird could I see, which was most aggravating, for it seemed as if he was nigh at hand. Finally, I threw a stick up among the boughs, and a little brown bird darted out, and lighting in a bush quite near, after remarking *chick, chick*, repeated his *wish-enew*. I looked at him carefully, and decided he was a Wren very quickly; but which one, I don't know yet. He was ruddy brown above, dirty white beneath, with a pronounced gray superciliary line, and an ashy cheek-patch. His tail was short, but I couldn't see the pattern. He seemed larger than the House Wren. His bill was about two thirds of his head, I should say.

On walking further, I saw in a thicket a Thrush that I think was the Olive-backed, but it was too dark to see well.

Down at the shore I looked over to a little island, about thirty feet out, and in a willow there I saw a pair of what I am firmly persuaded were Blue-gray Gnatcatchers. They hid down among the branches, and from there dropped into the long grass, and were lost to view. Back in the woods I saw a Wilson's Thrush and many Warblers, chiefly Maryland Yellow-throats. I saw a few ♂ Black-throated Blue Warblers, and one inconspicuous Olive and Gray Warbler that I think was the ♀ Black-throated Blue.

Up in the woods on the hills back of the river I flushed two Golden-winged Woodpeckers, and saw a Least Flycatcher and two Pewees.

Herbert W. Congdon.

1336 Spruce St., Philadelphia.

A Taxidermist's Gun.

I was in a predicament. Probably I am not the only one. I was going to school five days in the week and working on a "ranch" every Saturday.

I could not take my shotgun to school with me, nor could I hunt on Sunday; yet I couldn't slight the birds, and the spring days were passing rapidly without much effect upon my collection. Something had to be done, and to the best of my financial ability I did it.

One evening I created no small sensation in the family by coming home from school bearing in state an old 45 calibre "Colt's Navy" that had crossed the plains in 1849. It was a villianous looking weapon, to be sure, and a little out of date, but it's a poor gun that's not better than no gun at all.

The gunsmith cut the rifling for fifty cents and my Indian tamer was transformed into a bird call. The barrel proper is but 8 inches long, but with paper cartridges I brought a California Cuckoo completely lifeless from the top of a willow 30 or 40 ft. high.

A convenient clarinet case of my brother's makes my outfit complete and with the unoffending disguise of a less dangerous instrument, my pipe (as the teachers call it) accompanies me on my 4 mile walk to school every morning.

It is not a perfect taxidermist's gun, but many a specimen in my cabinet I owe to this magic "pipe." If my brother student be cramped by a school-boy's pocketbook, let him go and do likewise, and according to my experience he will be repaid.

Loye Miller.

Riverside, Cal.

Notes from Iowa.

I will mention a few of my finds of this season. A nest and two eggs of the Brown Creeper; nest between loose bark and body of cottonwood. Eggs partially incubated; bird shot. A nest of common Crow contain-

ing nine eggs. A set of five albino eggs of the Bluebird. A set of five Catbird eggs, spotted with dark brown, and a set of two Krider's Red-tail Hawk — not bad for rare or unusual sets. I have collected skins of Yellow Prothonotory, Chestnut-sided, Black-throated Blue, Black-throated Green, Bay-breasted, Pine Creeping, Magnolia, Blue-wing Yellow, Golden-winged, Tennessee, Myrtle, Nashville, Prairie and Golden Crowned Warblers and Yellow-breasted Chat. Quite a fair result for one season. All were shot with a 22 calibre Merwin Hurlburt, Junior, rifle and shot cartridges. *G. H. Berry.*

Cedar Rapids, Iowa.

Nesting of the Hooded Warbler.

This beautiful little Warbler is one of the rarest Warblers I have the pleasure of studying. They usually arrive here the first week in May and soon commence their nest building, and full sets are completed by the first week in June. They choose for their nesting-site some large piece of woods, usually high land, well filled with small undergrowth, and then place their nest in a small thick beech or maple bush, usually from 12 to 24 inches from the ground; but I took a set this season thirty-nine inches high.

The nest is a plain structure, composed of dried leaves and vegetable material, occasionally lined with a little horse hair and a few spider webs outside. It is quite bulky for the bird, and one would think easy enough to find; but when you enter a large piece of woods so well filled with small undergrowth that you cannot see ten feet ahead you will find it quite necessary to get down on your hands and knees to look for their nests.

I have found them readily, and have looked two or three hours in this way for them; yet the longer I look the stronger are the ties for that particular nest. You rarely ever see the male bird, and if the female is sitting you have nothing to guide you; but even

then the Cowbird has often found it ahead of me and left her mark.

I think the most secreted nest of the Hooded Warbler I ever found had been visited by the Cowbird.

Although I find nests of other species of Warblers, I take more pleasure in looking after *Sylvania mitrata* nests under those difficulties than any other, unless it is the Blackburnian, although I have never been able to find but one set of their eggs. I succeeded in taking seven sets of the Hooded Warbler this season, five sets with four eggs each, and two sets of three. I have never taken a set of five. Eighty per cent. in my experience contain four eggs.

Almon E. Kibbe.

Mayville, N.Y.

Detroit, Mich., 1891 Notes.

April 29. I went out along Green Avenue to-day and took my first 1891 eggs—sets of four and five. Song Sparrows from nests along the road. Saw my first Bobolink.

May 2. Bluebird; set of five eggs from a nest in hole of poplar.

May 15. Meadow Lark; set of six eggs from a well hidden nest in a field at foot of Medbury Avenue. The Lark does not seem to breed here as commonly as in former years.

May 24. H. Allis and I went collecting in the swamps near Voight's woods.

Olive-backed Thrush; I found two nests containing four eggs each. The nests were in low bushes, and were shrouded over with green leaves, and were very pretty structures; each contained a Cowbird's egg. I never found any nests of this Thrush before.

Brown Thrasher; set of three eggs from nest in a small bush. The ♀ made a great fuss when disturbed.

Yellow-billed Cuckoo; found a nest containing one fresh egg, and another two half-fledged young.

Wilson's Thrush; took a set of four eggs and one of the Cowbird. The Viery does not

breed here as commonly as the Wood Thrush. Took one egg of the latter.

May 27. Wilson's Thrush, three eggs, and Catbird four eggs. H. Allis shot a ♂ Myrtle Warbler, but we failed to find the nest, if there was one.

May 31. Wood Thrush; set of four fresh eggs. This Thrush is a most exquisite songster, particularly in rainy weather, when his clear, ringing notes seem to be far sweeter.

June 5. J. Claire Wood and I went collecting in Chestnut Ridge. Took a set of five Bluebird eggs from a hollow post. Wood killed a very large Woodchuck in the woods.

Scarlet Tanager; found a nest in an iron-wood tree, 16 feet up, containing four incubated eggs. Claire shot the ♂ and ♀. The nest was extremely fragile. The Tanager breeds very rarely here, the only other nest I know of being one Mr. Wood took on Belle Isle on June 12, 1887, with one egg.

Red-shouldered Hawk; a nest in a tall oak tree, containing three young. The nest contained two snakes.

Crow; found a nest with four large young nearly ready to fly. I took one home with me and it remained till August, 1892, when it died.

June 8. Wood and I went out to Highland Park. Took a set of four spotted eggs of the Wilson's Thrush, and 3 Catbirds. Shot two Woodcock in a swamp, and two Scarlet Tanagers, ♂ Redstart, Yellow-billed Cuckoo, Ovenbird, Wood Phoebe, Vesper Sparrow, Brown Thrasher, etc., in the woods.

June 10. Went collecting on Grassy Island in the Detroit River, with the Wood brothers. We collected 68 Marsh Wren, 36 Florida Gallinules, one set of Eight Horned Grebe, three sets of Black Terns, two of three and one of two; and one set of one Red-winged Blackbird. We had hard work getting them, as the sharp reeds cut our legs and bodies up badly.

June 12. We went down to the marshes again and had splendid success, getting fifty Gallinule, 35 Coots, 40 Marsh Wrens, 76

Black Tern, 20 Horned Grebes, 20 Pied-billed Grebes, one Blackbird and two Least Bittern eggs. The Black Tern were in swarms. A pair of American Bitterns nest here, but we couldn't find the nest.

June 30. Found a nest of the Wood Phoebe at St. Clair containing one egg and two young. The nest was a most beautiful structure of lichens saddled on the bough of an apple tree.

July 30. Saw a fine Bald Eagle flying down the St. Clair River. It lit on a telegraph pole on the river wall for a few minutes. Miss M. Ellen Lane saw him again later.

July 31. American Goldfinch: set of four eggs from nest in an apple tree 15 feet up.

B. H. Swales.

Detroit, Mich.

Old Orchard, St. Louis Co., Mo.

"Who can do better?" asks Mr. S. R. Ingersoll ("O. & O.," XVIII. 5, page 77) after naming 14 species nesting within 300 feet of his "home among the birds."

While this may be an excellent showing for some parts of the country, it could hardly be considered extraordinary in this Mississippi Valley.

To the general reader who has not taken actual measure, it is proper to say that a 300 foot limit line around a country house incloses a much larger area than one might suppose.

Within 300 feet of my house I counted not less than 280 trees of 30 different kinds, besides a large kitchen garden, flower garden, vineyard, part of a pasture, part of 2 ponds, outbuildings, lawn, rockroad, etc.

It is true that I took pains to attract birds by putting up bird-boxes, stumps with holes, brush piles, etc., and also that birds are never molested. They can eat all the peas, cherries, berries, pears and grapes they want (and I think the whole damage don't amount to 50 cents a year); they can drink all the water they want, build wherever they want

and can make all the noise they want—the more the better.

The following is a list of all the birds found nesting within the 300 foot limit; the numbers mean pairs, not nests; some breed, of course, more than once in a season, and in some boxes three broods are raised in one season, for instance, two broods of Bluebirds and afterwards a brood of House Wrens.

Woodthrush, 1;	Martin, 7;
Kingbird, 1;	Robin, 2;
Chippy, 2;	Great-crested, 1;
Mockingbird, 2;	Field Sparrow, 1;
Phoebe, 1;	Catbird, 4;
Towhee, 1;	Pewee, 1;
Thrasher, 1;	Cardinal, 1;
Trail's, 1;	Bluebird, 2;
Rose-breast, 1;	Swift, 1;
Tufted Tit, 1;	Indigo, 1;
Redhead, 1;	Bewick's Wren, 1;
Baltimore, 1;	Flicker, 1;
House Wren, 6;	Orchard O., 2;
Mourning dove, 1;	Maryland Yellow-
Br. Grackle, 4;	throat, 1;
European Tree Spar-	Warbling Vireo, 2;
rows, many pairs;	Bluejay, 2.

Another species reared within 300 feet is the Molothrus. One young Cowbird was reared by a Pipilo and another by a Pewee. An extension of 150 feet would add such species as Horned Lark, Dickcissel, Meadow Lark, Lark Finch, etc.

O. Widmann.

A Utah Egging Trip.

One beautiful morning we left American Fork bound for the lake, our party consisting of the captain, an old sea dog who still "hankers" after the water but pretends to go with us boys to see that we do not get drowned, also two young friends, interested in anything that flies, and myself. On the way to the lake we met a boy who said he had just scared up a bird with an awful long bill, so we impressed him into the service and he took us to a fine nest of four Wilson's Snipe, eggs all laying with their points together in a nest of dry

grass in a little hollow close to an irrigating ditch. Gathering them into a collecting box we proceeded to the lake and in a very few minutes had the moorings to the "Sea Gull" cast off and were standing off towards a large slough or swamp that we proposed to explore.

The day looked windy, and I might explain that the mountain squalls are peculiarly violent here; but on this day we did not care for the looks of the weather as we were off for specimens. Anchoring off the mouth of the creek that empties into the lake from the swamp, we soon were in the small skiff and pushing up the creek through the tules. Every moment some one would see a Yellow-Headed Blackbird's nest or a Tule Wren's, which we would examine; but it was unsatisfactory collecting the latter, as each pair of birds appear to construct at least five decoy nests, and hence it was a long task to get many nests with eggs. Every little while some other nest was discovered and we found on reaching the yacht that we had a set of 10 Mallards, three sets of American Coot, one set of American Bittern, and one set of some kind of Goose or Swan. The latter eggs were in a large nest floating on the creek, but were spoiled and had evidently been left by the old birds on account of the rising water.

We next set sail for the opposite shore of the lake, some ten miles distant, where we arrived in a short time. Leaving the captain to run the yacht, we boys went ashore and walk for some five miles along in the sage bushes and found in this walk ten sets of Sage Thrasher's eggs. This bird was the commonest of any we observed on the west shore of the lake, and every nest we found was built in a greasewood bush about two feet from the ground, and constructed of dry greasewood twigs and lined with bark and sheep wool. The eggs were four and five, but five principally, and were most beautiful, being of an iridescent green with brick-red spots.

We found a Burrowing Owl's nest and

hailed the yacht for something to dig it out with, but as a couple pair of oars did not make good spades we gave it up as a bad job. Just about this time one of the boys discovered a Blow Snake, which got away, but it seemed to be at least six feet long, and indeed this is not an unusual length for this snake. About three o'clock the wind, which had been quite strong, began to develop into a little gale and we were obliged to go aboard and get the yacht off the lee shore. We made for Pelican Point, some six miles distant, in hopes of rounding the same and obtaining shelter, but the wind increased so suddenly that by the time we were about five miles it was blowing so that we were obliged to take in even the close-reefed jib sail and anchor. The boys not appreciating supper in the high seas that were running, we all put off for the shore, where they discovered a dug-out in which lived a Danish family. On learning our plight they took us in and were hospitality itself. I do not suppose that many of the readers of the "O. & O." have seen a dug-out, but for solid comfort in a hard storm out on the sage plains or desert I would prefer a good, large, clean dug-out to any camp I know of.

By the following morning the storm had lifted somewhat and we managed to get our skiff into a large patch of tules and swamp that was near, and here we found many more Yellow Heads and Mudhen's eggs. A Loon was out in the lake, but my rifle either could not go straight or else I could not point it straight, and I only succeeded in frightening it away. About noon we got up a corner of our jib sail and made a run before the wind of ten miles to Springville Lake, where we arrived at one o'clock with two sea-sick boys on board. On entering the gap into the lake we anchored in perfectly calm water and right in the midst of a perfect archipelago. The little boat was immediately called into service and we began explorations. Almost the first thing that we saw was an island simply covered with Great Blue Herons and we

counted about 60 nests built flat on the tules (there being no trees in that part of the country). After taking some good sets of these eggs, we went all around among the islands and found some American Eared Grebe and also one set of Western Grebes, three eggs. These Grebes, or Hell Divers as they are called locally, build a floating nest on the still water, and construct the same of tules; the eggs are therefore not more than two inches from the surface of the water. As we were all tired and provisions growing alarmingly low, we concluded to go home. If I gave a description of that I fear it would be simply a description of high waves, sea-sickness and terror for all the boys and delight for the captain. Never was I more glad to get on dry ground again with my eggs, for on the trip home wouldn't I have given them all for some assurance that we would get ashore safely.

The next day my cabinet bore evidences of a good addition, and, after all, was not this a trip to look back upon and feel proud of?

H. C. Johnson.

American Fork, Utah.

Nesting Habits of the Great-horned Owls.

We have found three nests of this species during the past few years near the river St. Lawrence. The first some years ago in a small tamarack tree, which in May held two young just able to fly. This nest had previously been a Crow's. The second in 1892, in a second-growth white pine. It was a disused squirrel's abode, and on the 25th of April contained two young about a fortnight old. The young were not molested, but this year there were no signs of Owls in those woods. This year we found a nest in a white birch on the 11th of April; it contained two eggs; incubation advanced. The same nest last year and the year before was tenanted by the Red-shouldered Hawk, which is our most common Hawk in this locality. This is all I know of the habits of

Bubo Virginianus, except that we have kept one in confinement for several years, in fact since it was a nestling. I have it still.

C. J. J.

Leeds Co., Ont.

Nesting of the Broad-winged Hawk.

I enter *Butco latissimus* as a tolerably common breeder here, as I know of four nesting localities within five miles of this village, and had I time to explore suitable territory during the meeting season, doubtless many more would be found.

Speaking of the Broad-wing, calls up pleasant remembrances of my first acquaintance with the nesting of this species, and it was the first Hawk's egg to enter my collection. Although it was taken over ten years ago, the scenes and incidents of the trip are as fresh in my memory as though it were yesterday. I have no need to refer to my note-book to give the data.

May 6, 1883, I was searching for nests in the large tract of timber known as the "Eighty Acres." Coming out on the brink of a hill, where the forest slopes down to the banks of Black Brook, the object for which I had so long and eagerly tramped the woods met my view, sitting quietly on her nest. Some distance below I saw a Hawk and I hurried down. She reluctantly left at my approach, but kept about the nearest trees uttering her sorrowful, pleading notes until I left the vicinity. The tree was a rather scrubby white oak, easy to climb. I was soon at the nest, twenty-five feet up in a crotch near the top. It was small in diameter, but deep and with a shallow nest cavity. There on a lining of bark strips, scales of hemlock bark and green sprigs of hemlock, lay a beautifully marked egg. The markings are bright russet, on a ground color of greyish-white, with a slight tinge of greenish. They are very heavy, and evenly distributed over the entire egg; very little of the true ground color shows; here and there

specks and spots of lilac show through the russet. Size, 1.91 x 1.57.

During the succeeding years I have taken quite a presentable drawer of eggs of our breeding Hawks, but my first egg is the gem of them all.

On May 5th, 1892, I was afield up the valley of Black River in a scattering piece of mixed timber. An old nest in a good sized yellow birch showed signs of being repaired. A visit on the morning of the 13th showed the nest nicely built up, with green twigs of hemlock showing in the sides. A vigorous pounding on the tree flushed no bird, so I turned to leave and there on the lower limb of a tree not two rods away sat a female Broad-wing. I strapped on the irons and went up to find the nest all ready for their reception, but no eggs. Several visits during the next twelve days did not warrant a full set. I went up again the 26th and found two eggs, clean and fresh, one about half as large as the other. I brought them down, then changed my mind, went back up and left them in the nest. I climbed up again on the 28th, still only two eggs, which I now took. The owner protested with her sad, supplicating notes. The larger egg is faint bluish-white, sparsely spotted and specked with umber-brown, portions of the surface slightly granulated, somewhat flattened on one side; size, 2.00 x 1.59. The smaller is unmarked, pale greenish-white, pointed at one end, shell very thick and rough; size, 1.76 x 1.30. It contained no yolk, but, besides the white, several pieces of tough substance resembling the inner lining of the egg. The nest was twenty-seven and a half feet from the ground, and, as I have before stated, was an old one rebuilt, thickly lined with inner barks, chunks of lichen, covered red-oak bark, pieces of rotten wood, sprigs of green hemlock and several wing and tail feathers of the owners. Greatest outside diameter twenty-eight inches; smallest, fifteen inches; inside diameter, eleven inches; depth of nest cavity three inches.

Benjamin Hoag.

Stephentown, New York.

A Peculiar Nesting Site of *Coccyzus erythrophthalmus*.

During the present season I have taken seven clutches of the above species, and have been familiar with the bird from my early boyhood, but had yet, up to June 4th, 1893, to find a nest on the ground. In this case the nest was placed in a clump of weeds and within two inches of mother earth. The bird was flushed, and both bird and nest were typical. Two eggs, partially incubated, made up the clutch. I should be glad to hear from other collectors concerning their experiences in this direction.

C. L. Brownell.

Nyack-on-Hudson, N.Y.

Notes from Riverside, Cal.

I took, this spring, a very queer specimen of Brewer's Blackbird. It is a young male, but instead of having the brownish cast of the young, it is a hoary ash on breast and throat, and the first four primaries of each wing are snow white. Otherwise it is normal plumage.

September, 1892, I secured from a flock feeding in sunflower ticket a female *Carpodacus frontalis*. The plumage is white, with the markings of the female of this species outlined in pale brownish buff. The bill and feet are flesh color; the eyes are, however, the usual dark-brown.

I would like to know something about the range of the Black Rail (*Porzana jamaicensis*). I secured a fine specimen here August 13, 1892, while mowing alfalfa hay.

Loye Miller.

Riverside, Cal.

Benjamin F. Goss died at his home in Pewaukee, Wisconsin, on July 6, 1893, aged 70 years. He was an oologist of considerable prominence, and his death will be lamented by his many friends.

We have just printed a price-list of Birds' Eggs, which will be sent on application.

Sketch It.

How many of my readers do not keep a note-book? Scarcely one, if he be a naturalist. To claim to be a student of nature and and not keep a note-book would call forth as much scorn these days as would be provoked by the assertion that a man was a merchant when people knew he didn't even keep a ledger.

Therefore I will take it for granted that we all keep our observations recorded. If not for the public, at least for ourselves.

Now next winter, and the succeeding winters and summers, which I hope you may all pass pleasantly, you will be looking over this year's note-book. You will read how you saw that handsome Duck Hawk in the White Mountains or those rare Warblers in the swamp. Then you will turn over a page and read how you scaled the mountains and swung over the ledge for those eggs and found young, or how, after weary hours' searching for the home of that Cape May, you found an old nest, vacant these three years. All this and more you will recall with pleasure as you are snugly settled in your library, caring naught for the gale outside.

You will laugh as you think of the hard words you thought when you were disappointed, and you will try to bring those happy remembrances up before your vision. But you can't. No, sir, they won't come. You will confuse scenes of trout fishing and that fine shot at the Woodcock with the sight that greeted your eyes as you hung suspended two hundred feet in midair, or you will remember that morning on the marshes with the Mallards coming in in big wedges, and you will hear the boom! boom! of your double, followed by the splash-h-h, thud, thud, as those five came down to two shots.

All this or something just as misleading will be mixed in with your ornithological ideas and you can't help yourself. That is,

you cannot unless you sketch it. "Sketch it?" "Yes; why not?" "Why, I can't sketch." "Perhaps not, but learn."

You couldn't walk once, but you learned. You couldn't read — you learned. You couldn't write — you can now. How is it? Why, you learned, of course.

Well, then, learn to sketch, and when you go on a trip take your sketch-book along.

Whenever you see anything that interests you and you enjoy, sit down and sketch it. Yes, sir, sit right down and sketch, sketch, sketch. That's the way to learn. Try it. Try again and you'll succeed.

Arthur M. Farmer.

Amoskeag, N.H.

A. H. B. Jordan writes that a Rubythroated Hummer met death in a peculiar manner at their mill at Johnsonburg, Pa. It flew into the bleachery window, and, encountering the flumes of chlorine, dropped dead in an instant as if it had been shot.

Two sets of eggs of the Passenger Pigeon just received are the first that we have had sent in for a long time.

Now that business is again starting up, pay your small bills. They are really of more importance than they appear. Subscribers should think of this. It is necessary for the continuation of a publication. The printer's bill must be paid.

Alligator eggs are soon to be very rare, those at least from Florida. Where we used to have them offered by the thousand, we now seldom hear them mentioned.

Two lobsters were recently caught at the Cape weighing 19 and 17 lbs., respectively. They were preserved.

Summer Birds of Green County, Penn., by J. Warren Jacobs, Waynesburg, Pa. It is a list of Birds found in the locality during the breeding season, describing localities frequented, dates of nesting, etc.

THE
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 AND TO THE
INTERESTS OF NATURALISTS.

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 It you fail to receive it, notify us.

WHO WILL ANSWER?

Editor of O. & O.: I wrote you quite a while ago asking a question that you published, but there has never been an answer to it. Please try it again. "What is authentically known in regard to the rapidity of flight by different species of birds, and which is considered the swiftest?"

Yours truly,
Jas. B. B. Smith.

BIRDS OF MICHIGAN—A REVIEW.

During the past month of June there appeared a very comprehensive list of the Birds of Michigan. This new work of one hundred and fifty pages, embraces three hundred and thirty-two species and races of birds found in the peninsular State, with copious notes. These notes are especially entertaining in their reference to the food of birds, and in many places the master hand of the author is evident. This is particularly noticeable in the occasional descriptions of the food habits of some insectivorous species, where the observations are very interesting.

The author of this work is Professor A. J. Cook, State entomologist of Michigan, a gentleman eminent in his profession, and an

instructor in various departments of science at Michigan Agricultural College.

The professor has given evidence of his ability in selecting the most appropriate notes from the great mass of material at hand. Michigan has been for many years one of our leading states in the study of ornithology, as it is the home of a large number of ornithologists. These students have, with scarcely an exception, assisted Professor Cook. The result has been that the combined observations have been boiled down, systematically reduced and sifted; and we can safely say that the whole list is as exact as it is possible for any compiler to construct it from a general collection of notes. In fact it is but proper to acknowledge it as a marvel in compilation.

There are several incongruities and a few absurd errors, some of which are absolutely ludicrous in their glaring stupidity. However, the author has wisely shielded himself and escaped possible criticism by embracing these infirmities of inaccurate observers within evasive quotation marks.

Michigan's bibliography is necessarily large, and the very nearly complete list of catalogues and articles fills twelve pages. This list presents notice of all available written matter from 1832 to 1893, inclusive. The first catalogue of the Birds of Michigan, by Dr. Abr. Sager, 1839, embraced 164 species. Dr. M. Miles's list, 1861, contained 203 birds, and Dr. Morris Gibbs's catalogue, 1879 embraced 309, species and races.

We are pleased to note that the departed friends and fellow ornithologists, W. H. Collins of Detroit, Hon. D. Darwin Hughes and Charles W. Gunn of Grand Rapids, and Dr. H. A. Atkins of Locke, are quite frequently quoted. In fact each one, living and dead, who has advanced Michigan ornithology in a literary way has received due credit, while many collectors and observers who do not write are referred to in the text.

In addition to the above matter is a resume of the game laws, together with mater-

ial pertaining to protection of birds. The typographical and press work is excellent and cannot fail to be satisfactory.

In addition to Michigan notes, many observations refer to Ohio, Indiana and Wisconsin. Space forbids my speaking more fully, or I would enumerate the outsiders to whom we are indebted. Suffice it to say that the work is, properly speaking, a very complete treatise on the birds of the Great Lake Region and will interest all. *L.*

Brief Notes, Correspondence and Clippings.

T. A. James writes from Meriden, Conn., that he has a young Chipmunk that is nearly white and is about half grown. It has a brown patch on one shoulder and a few spots on the back.

A word or two more about Pine Grosbeaks. As they are strangers here, this winter they created quite an amount of notice. Every day or two some one would ask the question, What new birds are these around here? On February 5th, when I arrived home from church, my 12-year-old girl ran to meet me saying, "O, papa, I have caught one of those Pine Grosbeaks; he was so tame I put my hand right on him while he was eating horse-brier berries." I have kept him (I say him for I think it is a male, as he sings very sweetly, although it has not the red plumage) in a cage since that time. Once a week I bring in a small pine tree and let "Dick" out for a nice time, which he seems to enjoy very much. He is very tame; will alight on our heads and makes himself very much at home in general. He feeds freely on oats, pine buds, sand, apple and other seeds, and has a very nice time bathing in a saucer of water.

On April 20, in answer to a rap on my door, a friend says, "I have a bird here; I would like to know what it is." So we took out the bird, which was stuffed into a large

paper bag with a lot of paper wound around his head and throat filled with old rags. Well, to tell the truth, I was stuck for a minute, but told him I guessed it was a Turkey Buzzard, which proved to be the fact when I looked him up. This is the only one I have ever heard of in eastern Massachusetts. Have they been taken in this vicinity before?

C. C. Foster.

West Duxbury, Mass.

A full plumaged Bald Eagle was seen by E. G. Duncklee at Blue Hill on June 4.

April 30 I found a Bluebird's nest in a somewhat peculiar situation. A two quart milk can, which had been used in a cemetery to hold flowers, had been placed in the fork of a bush right side up, and the bird at this time had five eggs in it, entering and leaving the can by the top. I was somewhat curious to learn what effect a heavy rain would have on the bird; but one we had soon after, apparently had no effect as the can probably leaked, preventing the bird from being drowned out.

July 4, while roaming over the country, I came across an old building which had been used as a carpenter shop. Of course I had to investigate. Up stairs on a projecting board next to the ceiling, I found a Pewee's nest with five eggs, while in the basement among the floor timber I found a Robin's nest containing four young birds. On an offer of fifty cents apiece, I have the young fellows of the neighborhood on the rampage after Bat's eggs.

Rufus H. Carr.

Brockton, Mass.

Here are a few of my "finds" this year: April 29, Crow 4, Cooper's Hawk 2; May 28, Sore Rail 10; June 11, Indigo Bunting 3; June 20, Phoebe 6; May 20, Phoebe 5; May 21, Vesper Sparrow 4; May 24, Vesper Sparrow 4; May 28, Yellow Warbler 2; July 29, Goldfinch 5; July 30, Goldfinch 6.

On April 29, 1893, I collected a set of two fresh eggs of the Cooper's Hawk from a nest 75 feet up in a beech in a thick piece

of timber in Highland Park. This is the first nest of this species I ever found, although the bird is sometimes seen. I shot the male a short distance off.

B. H. Swales.

Detroit, Mich.

In Oliver Davie's book on birds, an account is given of the eggs, etc., of the Black Swift taken at Yesler's wharf on salt water. Would say that I have been here since 1888, when they were claimed to have been taken. I have never seen the Swift on salt water. On Lake Washington (fresh water), a few miles distant, they are abundant, occasionally flying within gunshot. Around Yesler's wharf Purple Martins are plenty and were during 1888. The Swift seems to keep away from habitation, and Yesler's wharf in 1888 was the scene of great bustle and activity. I have watched the Swift and think they breed in hollow trees inland. Mr. S. F. Rathburn and the writer thinks, perhaps, those eggs found in 1888, at Yesler's wharf, were Purple Martins. I would be glad to hear from the owner of the set of eggs.

Frank H. Renick.

Seattle, Wash.

He was a happy naturalist,

Well versed and of repute.

For with the learned Ph.D.'s

He would often dare dispute.

He worked on ornithology,

For this his favorite was,

Also dived in entomology

And conchology and its laws.

He could talk of cerripeds

In language quite astute,

And when he spoke jaw-breaking names

His friends all thought him cute.

But now no more he talks of birds.

No more afield he's carried,

The trouble isn't that he's dead,

But simply this—he's married.

B. H. Carr.

W. E. Mulliken, care of C. & W. M. R.R., Grand Rapids, Mich., wishes the address of all ornithologists. He proposes to get out a directory.

Carl Fritz-Henning is engaged in a work, "Notes on the Birds of Boone County, Iowa," which he expects will cover 420 pages, with 40 plates drawn and colored from nature. He hopes to complete it during the present year.

We are constantly receiving letters from entire strangers asking us to send small lots of goods. They do not seem to entertain the idea of enclosing cash for same, and get indignant if their attention is called to it. If, to accommodate, we send the goods, we then have to whistle for our pay. We wish it to be understood that we are now doing a strictly cash business.

It isn't every spring chicken which has friends who swoop down upon the sufferer in time of trouble, bringing a new suit of clothes. Mrs. W. H. Pearson, who lives on the east side of the river near Farmington Fall village, has a freak of nature in the shape of a spring chicken. The chicken was born as other chicks are born, but it failed to grow as the others did and the down upon it gradually dropped off, so that now its skin is entirely bare of feathers, and the little body on tall legs, and with its head, presents a ludicrous sight. The other chickens peck its bare skin and drive it away from the food, so that it wanders off alone and picks up its food when a chance to "snatch something and run" presents itself. Mrs. Pearson has made a "coat and vest" for the naked chicken in which he struts about the yard like the long-legged dude.

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No. 8.

Distribution of the Yellow-Headed Blackbird in Illinois.

Winnebago County, No. 3.

J. E. Dickinson. Has never observed it, but has seen specimens which were shot in the Kiswanke Bottoms, about ten miles south of Rockford.

F. A. Gregory. Has not observed it.
Lake County, No. 6.

Gordon Schanck. An abundant summer resident. Arrives in the latter part of March or the first of April; departs in October or November. Breeds commonly in sloughs, from May 15 to June 15. Nests attached to reeds $1\frac{1}{2}$ to 2 feet above the water. Eggs, 5; incubation about two weeks; one brood.

O. H. Swazey. Has not observed it, but hears that it is found within ten miles of Lake Forest in some swampy regions.

Lake and Cook Counties, Nos. 6 and 7.

W. E. Pratt. Common summer resident. Found in colonies at Calumet and Mud Lakes, Cook County, and Grass Lake, Lake County. Commences laying at Grass Lake the first of June and about a week earlier at Calumet and Mud Lakes. Has never found them at any of the various small sloughs, and regards them as restricted to the above named lakes. Eggs 3 or 4; only one set of 5 ever observed. Has found a Cowbird's egg in a nest of this bird.

Cook County, No. 7.

George B. Holmes. Summer resident; fairly common. Breeds in swamps.

F. L. Charles. Breeds abundantly at Calumet Lake. Does not occur near Austin as there are no large sloughs in that locality.

H. Gillingham. Has not met it near Oak Park.

D. A. Young. Summer resident. Arrives the first part of May, departs during October. Found in colonies in the larger marshes, where it breeds commonly in the latter part of May or first of June.

"Birds of North-eastern Illinois." E. W. Nelson. Cook and Lake Counties. "Very common summer resident in large marshes. Arrives the first of May, commences nesting the last of this month. Owing to the restricted localities inhabited by this bird, it is very slightly known among the farmers, even those living next the marshes generally think it an uncommon bird."

Du Page County, No. 10.

B. F. Gault. Considers it rare in Du Page County. Reports that it is a common summer resident at Calumet Lake, Cook County, and found sparingly in Fox Lake region, Lake County.

DeKalb County, No. 10.

L. W. Nichols. Summer resident, but found sparingly on account of the absence of suitable localities for nesting. Very common in McHenry County, No. 5, where it breeds around the lakes and sloughs. Earliest breeding date May 22; latest July 24; eggs 4 to 6.

Davenport, Iowa, opposite No. 15.

B. H. Wilson. Has never observed it. Said to breed in a small slough near Muscatine, Iowa, but did not find them on a visit in August.

Henry County, No. 16.

Dr. A. C. Murchison. Summer resident. Arrives last week in March. Abundant in

the northern portion of the county; rare in the southern. Breeds commonly in the latter half of May or first of June. Over 200 nests found in one day. Eggs invariably 4; one brood.

La Salle County, No. 18.

A. Hamfeldt. Has not observed it, although there are many prairie sloughs in the vicinity.

Marshall County, No. 25.

R. M. Barnes. Summer resident; rare. Never found it breeding in the county, but it breeds commonly a few miles north of the county line (Putman County, No. 24). One brood raised; date of nesting depends on the stage of the water. Has taken eggs from June 1 to July 6.

Stark County, No. 26.

V. Chase. Has not observed it.

Keokuk, Iowa, opposite No. 31.

E. S. Currier. Has seen but one, which was with a flock of Grackles. Reports that it is said to have been seen late in May at Grove Pond, Clark County, Mo.

Clark County, Mo., opposite No. 31.

C. P. Fore. A rare bird. One or two individuals observed in the spring of 1888. Formerly observed in company with the Red-wings.

Fulton County, No. 33.

W. S. Cobleigh. Transient. Can be seen associating with flocks of Cowbirds and Grackles in the spring migration. Does not remain to breed.

Dr. W. S. Strode. Has not observed it.

Peoria County, No. 34.

B. F. Bolt. Transient but rare. Has never found it in the summer and does not consider it a breeder.

W. E. Loucks. This bird passes through this locality in very limited numbers according to my observations.

Tazewell County, No. 36.

D. Meixsell. Has observed it in flocks of other Blackbirds in the spring migration.

Vermillion County, No. 40.

G. C. Pearson. Summer resident. Ar-

rives with the Red-wings in parties of 30 to 100 birds. Departs in September in immense flocks. Nests in sloughs and feeds on seeds and small grains and insects.

Logan County, No. 45.

Charles Wells. Reports no swamps in his locality (Atlanta) and so has not observed it.

Morgan County, No. 54.

C. F. Tindall. Does not mention it in his report.

Madison County, No. 73.

List of birds, etc. Julius Hurter. A rare transient. May 4 one specimen.

Bond County, No. 74.

Philo Smith, Jr. "One bird killed in Carlsyle and several seen in Fulton County."

St. Clair County, No. 75.

W. L. Jones. "A very rare visitant; does not breed."

O. Widmann. Regards it as a rare straggler. Single individuals, females, were met May 11, 1882, and May 9, 1885, in company with Bobolinks and female Red-wings.

Marion County, No. 77.

C. B. Vandercock. Has no record of it.

Perry County, No. 88.

J. C. Elliott. Has no record of it; is not acquainted with it.

Gallatin County, No. 92.

C. J. Lemen. Has not observed it.

G. W. Rearden. Transient. Passes through in April and May in flocks of 5 to 20 individuals.

Jackson County, No. 95.

Prof. L. E. Baird. Has not met it.

A species of irregular distribution and restricted to certain localities.

The geographical range of this bird in Illinois is difficult to define. Essentially a bird of the prairie sloughs, its restriction to them accounts for its irregularity in the state. Although Illinois is generally considered a prairie state, the settlement of the country, the drainage and cultivation of the land has caused the rapid elimination of many of these prairie sloughs. Consequently the resorts of the Yellow-headed Blackbird are few and far

between. The river sloughs, in close proximity to wooded districts, seem to be avoided, but those bordering open lakes and rivers are undoubtedly its rendezvous. As Mr. Ridgway has said, "the geographical range of the Yellow-headed Blackbird is quite co-extensive with the treeless districts of the western half of the continent."

Referring to the reports, we find it reported from counties 5, 6 and 7 as very abundant; in No. 8, considered rare; in No. 10, found sparingly. Here we have a group of five counties, in three of which the bird is abundant, and two in which it is found sparingly. The numerous lakes and large sloughs in the former three, and the absence of them, comparatively, in the latter two, is evidently the cause of this. Reported from No. 3 as not found near Rockford, but has been found in the Kiswanke Bottoms, ten miles south. Report from Davenport, Iowa, opposite No. 15, clearly indicates its rarity in that vicinity. In No. 16, reported as found in great abundance in the northern part of the county, and its comparative absence in the southern portion quite conspicuous. Due to the northern portion having extensive sloughs. From Ottawa, on the Illinois River, No. 18, reported as not found, although there are numerous prairie sloughs. Inasmuch as this county is quite large, and being represented by only one report, that from the central portion, I think the bird may be found breeding in some other part of it. I am strengthened in my belief as Mr. Barnes reports it as breeding commonly in No. 24. In No. 25, regards it as a rare summer resident. From No. 26, reported as not found, probably owing to the absence of marshy districts. In the vicinity of No. 31, reports show that it is of rare occurrence, evidently passing as a transient. In the central part of the state, in Nos. 33, 34 and 36, reported as a rare migratory bird. From No. 40, Mr. Pearson writes that it is a summer resident. In the southern half of the state it seems to be of rare occurrence, if found at all. No record

of it from Nos. 77, 88 and 95. In the vicinity of St. Louis, reported as a rare straggler, but from No. 92 it is said to pass through as a migrant. Perhaps the Wabash River is accountable for this, as it is the highway for many transient species. I quote the following from Mr. Ridgway's excellent work, "Ornithology of Illinois": "The Yellow-headed Blackbird appears to be confined to the prairie districts of the northern portion of the state; at least there seems to be no record of its occurrence elsewhere. The writer thought he once heard its note at Mt. Carmel, but was unable to discover the bird and may have been mistaken; but he was never able to find it on the prairies of Richland County, in marshy situations where the red-wings were abundant." While glancing over the list of birds observed in the middle and southern parts of the state by Robt. Kennicott, I find the following concerning the Saffron-headed Blackbird: "This bird I observed near Vandalia in July. I am informed that it nests in various parts of Southern Illinois." Vandalia is in Fayette County, No. 67, and if the bird was found here in July, it certainly must have been breeding. This list was published in the year 1855, and we would probably err should we suppose that the present range of this bird is the same as it was thirty-eight years ago. However, it may yet be found in certain portions of the southern half of Illinois, but we are yet to hear of it.

The reports do not contain sufficient information on the migration of this species to permit dwelling on the subject. In the spring migration, the Yellow-head mingles with the Red-wings, Grackles, Bobolinks and Cowbirds. Mr. Pearson writes that the Yellow-heads arrive in the spring with the Red-wings, and depart in the fall in immense flocks. Mr. Widmann communicates that he observed female Yellow-headed Blackbirds in company with Bobolinks and female Red-wings. The recognition of this bird is not difficult, being easily identified at sight. It is not to be overlooked, if to be found, as it is quite con-

spicuous among other birds, especially the Blackbirds.

Due allowance must be given to such obstacles as work of this nature has to contend with, such as the vacant localities not represented by reports, the ability of the observer and the amount of experience each has had. However, summing up the reports we have on hand, we have the following :

The distribution of the Yellow-headed Blackbird is subject entirely to the character of the country. The sloughs on the prairies and surrounding open lakes and rivers are its habitat. It may be found breeding in a certain slough, whereas in another, apparently just as suitable to its requirements, it is totally absent. Prefers large sloughs to small ones. In Illinois its distribution is not general, and very irregular in that portion wherein it is a summer resident. In the southern half of the state occurs a transient species, and, according to reports, is extremely rare, and in some localities has not been found at all. It may possibly be found as a rare winter resident in the extreme southern portion. In the northern half of the state it is restricted to favorable localities where it breeds. Found in great abundance in the counties adjoining Lake Michigan, especially so at Calumet and Grass Lakes, and in the northern part of Henry County, No. 16. So restricted is it to the localities wherein it inhabits, that a casual observer, even in the neighborhood of its resorts, would consider it a rare bird.

W. E. Loucks.

Peoria, Ill.

Nesting of the Saw-whet Owl.

As the nest of the Saw-whet Owl is considered quite a find and I have had the good fortune to take several sets, I will give some of my experience in that line, thinking it may interest the readers of the "O. & O." About two miles from this village is a tract of mixed timber land of 100 acres, more or less, composed of about three-fourths hard and one-fourth of soft wood timber, containing many

old growth trees and old stubs, a favorite resort for Hawks and Owls. Previous to this season I had taken two sets of Saw-whets from an old maple stub in this piece of woods and last season found the nest in the same place, containing young birds. As this brood was raised unmolested, I thought my chances for taking a set from the same nest were excellent this season. After three visits to the stub this year I made up my mind that I should have to look in some other tree for my Saw-whets, as I had seen nothing of them and it was getting later than the usual time for their nests. I was thoroughly acquainted with this locality, but it is something of a task to search carefully a piece of timber of this extent, and after a long and diligent hunt I began to think that my collection would not be enriched by the eggs of *Nyctala Acadica*. On approaching an old beech stub I was suddenly surprised to see the round head of an Owl looking down at me from an old Woodpecker's hole twenty feet from the ground. At this sight my spirits went up and at the same time my coat and vest came off and I prepared to "shin" up to the nest. Perhaps some of you know how easy it is to shin a tree that the bark has peeled from and left smooth as a flag staff. Add to this the fact that the stub was two feet in diameter and it is not very surprising that I came down suddenly after an ascent of eight or ten feet. I also discovered after two trials that the tree would not be safe for anyone to climb to the top of, as it leaned quite a little and was nearly rotted off at the base. This put a different aspect on the matter, and I began to devise some way by which to get the eggs which I felt sure were waiting for me at the bottom of that old nest.

I decided that I should want at least a rope and an axe ; so I went home and got these articles and returned with a man to assist me. The first thing was to put the rope around the tree and take a loop in it, then push the rope as far up the tree as we could reach with a pole, nearly twenty feet.

Then I took the other end of the rope and climbed a small tree a few feet from the stub and fastened it so that the stub could not fall in the direction that it leaned. We then cut several poles and propped the stub on all sides as high as we could make them hold. After this we cut a larger pole with a crotch at the top and leaned it against the stub, this pole reaching within four feet of the nest.

All my preparations being made I now proceeded to climb the large pole, the Owl watching me all the time. When I got within a few feet of the nest she dropped back out of sight and did not show up again. Before reaching into the nest I took the precaution to put a glove on my hand, knowing that Owls have pretty good claws. At the same time I reached into the nest the Owl reached up and grabbed me by the finger with both claws, I promptly pulled her out and gave her a toss and reached in again prepared to take out an egg. I was doomed to disappointment, however, as the nest was empty. I was a good deal surprised, as it was fully two weeks later than when I found the nest with young last year. After all this work I thought I would leave the rope for a few days to see what the Owl would do, hardly thinking it would return to an empty nest after being so rudely thrown off. At the end of a week I returned and found the same Owl staring down at me with the same surprised expression. This time I was in better luck and found four fresh eggs and three dead mice in the nest. I confiscated the eggs, leaving the mice for nest eggs, and three days later took two more eggs from the nest.

Passing by the nest about two weeks later I saw the Owl again and was very much surprised to find four more eggs, slightly incubated. These I took against my wife's most vigorous protests, as she thought I ought to be satisfied with one set from this pair of birds, but Saw-whet Owls do not nest in every stub, and I thought a bird in the hand was worth several in the bush. I have not

been past the nest since and do not know whether the Owl kept on laying in the same nest, but shall visit it in the spring and hope to find her at home. It was surprising how the Owl returned to the nest after being thrown off at least five times and robbed of her eggs three different times. Each time she followed the same course, crouching to the bottom of the nest and fighting for her treasures, and after being thrown off would dash past within a few inches of my head, trying to frighten me away.

I took a set of Red-bellied Nuthatch in much the same manner as the Owls' nest. It was in a shaky fir stub, about twenty feet up, and would not begin to bear my weight, so I took along a boy weighing about sixty pounds. I cut a small fir sapling, which reached nearly to the nest, and held it up against the stub while the boy scrambled up. He then rested on the top of the sapling while he whittled out the nest and took eight fresh eggs. In taking a set of broad-winged Hawk from a huge birch it was necessary to carry a twenty-five foot ladder a mile. Two fresh and handsomely marked eggs made this a very satisfactory piece of work. The way of the collector is hard and fraught with many difficult and dangerous climbs, but when success has crowned your efforts it is pleasant to think how some of your treasures were earned. *Fred B. Spaulding.*

Lancaster, N.H.

Bird Notes from Western North Carolina.

July 1st, of the present year, I took an excursion to Craggy, a large mountain near Asheville. Following is a list of birds observed on the mountain: Black-throated Blue Warbler, Black-throated Green Warbler, Arcadian Flycatcher, Wood Thrush, Carolina Junco, Carolina Chickadee, Tufted Titmouse, Indigo Bird, Bluebird, Mountain Solitary Vireo and Robin. Robins and Juncos were the only birds at the summit of the mountain.

On the same day I found a nest of the Carolina Juncos. It contained two eggs, and was situated under an overhanging bank beside a much-used trail. One egg was spotted with reddish-brown, sparingly on sides and small end, heavily on large end. The other was also spotted with reddish-brown, but the spots formed a ring around the large end. The nest was made of rootlets and horsehairs, which last were probably obtained from the horses pastured on the mountain.

Robins are not very common here in summer, but their numbers are increasing every year.

A few years ago Wild Turkeys nested on a spur of a certain mountain not far from Asheville.

Minot Davis.

Biltmore, N.C.

Austin F. Park.

The death of Austin Ford Park occurred yesterday afternoon at his residence, 62 Seventh street, after an illness since August from typhoid fever. The deceased had been a resident of this city more than fifty years and was widely known as one of the most devoted and best informed ornithologists. For many years Mr. Park had been a successful solicitor of patents, having had an office in the Boardman building since 1854. His work in this line had brought him in contact with some of the most prominent inventors of the country. He was a kindly, genial man, and possessed the affection of a wide circle of friends.

Mr. Park was born in Canaan, Columbia County, May 11, 1825, and after a preparatory education in the common schools and at the Columbia boarding school at Chatham he came to this city and entered the Rensselaer polytechnic institute in May, 1840, receiving in September of the same year a certificate, signed by Professor Amos Eaton, that he was well qualified for the degree of civil engineer but was not old

enough to come under the law. Mr. Park continued a student of engineering, astronomy and other branches then a part of the institute curriculum until March, 1841, when he received the degree of civil engineer. The young engineer did not leave the institute on receiving this degree, but remained as a student of chemistry, geology, botany and natural history through the summer terms of 1841 and 1842, laying then the foundation of that exceptionally large fund of knowledge which served him so well in after years and was the foundation for the taste for scientific subjects which was a pre-eminent characteristic of his life. Mr. Park remained as a student and assistant teacher at the institute through the winter terms of three years, and in 1843 and 1844 was engaged in engineering and surveying in and near this city. In March, 1845, the institute honored him with the degree of Master of Arts. In the succeeding May he entered the employ of Phelps & Gurley, with which firm he remained for nine years, engaged in making mathematical and philosophical instruments. During this time he invented and patented several telegraph instruments. After severing his connection with Phelps & Gurley, Mr. Park commenced business as a solicitor of patents, the practice of which profession he continued until the illness which caused his death.

Mr. Park was married in 1857 to Miss Caroline Esther Wood, daughter of Aaron Wood of this city. Mrs. Park survives her husband.

For many years Mr. Park was a commissioner of deeds of the city. He was one of the founders of the Troy scientific association, and had occasionally lectured before that organization, his addresses being listened to with great interest.

Mr. Park was captain of company G, twenty-fourth regiment, N. G. S. N. Y., from December, 1869, until March, 1873.

Mr. Park was the possessor of one of the finest collections of birds in the country.

The collection, many specimens of which were found by himself, embraced nearly every species of bird life in North America, and even now, in its apparently perfected state, was considered by Mr. Park still unfinished, so devoted was he to his wish for a collection that would be second to none. It was not an uncommon thing for him to be seen tramping through the woods and marshes in this locality in search of new specimens. He possessed an almost infinite fund of information concerning the habits of the denizens of the air. His collection is estimated to be worth from \$8,000 to \$10,000. Mr. Park has furnished the information for several interesting articles on birds which have appeared in the "Times."

The funeral services will occur from Mr. Park's late residence to-morrow afternoon and will be private. The burial will be at Oakwood cemetery.—*Troy, N. Y., Times.*

A Peculiarity in the Nesting Habits of the Virginia Rail.

Although I have talked with a large number of persons and read quite a few books on this bird (*Rallus virginianus*), I have been unable to hear of, or find, a feature in the nesting-habits similar to the following.

The first instance of the kind that has come under my notice, occurred on May 30, 1891. My brother and I were hunting in a small marsh in the vicinity of Dedham, Mass., for Rail's nests in particular. We had not been long at work when my brother called out to me that he had found a Virginia's nest with nine eggs. Being at some distance, it took me perhaps three minutes to reach him. While I was on the way, he had been hunting within a few yards of the nest and, when I came up, we immediately went to it. To our surprise and, at the moment, disgust we saw the old Rail standing among the eggs and, in the most cool and deliberate manner spearing them with her long bill. We made no delay in driving her off but not before she

had completely smashed three of the eggs, and driven her bill clear through another without otherwise injuring it. We have the remaining six still, and in my eyes, on account of the eggs drilled by the bird herself, they are more valuable than a full set of nine which lies beside them. By the way, nine eggs is the regulation set laid by the Virginia Rail in these parts, although occasionally seven makes a full set.

The peculiarity of the above mentioned marsh is the strictness of the society, one might call it, kept by the birds there. While Virginia Rails and Short-billed Marsh Wrens (*Cistothorus stellaris*) abound there, I have never seen a Sora Rail (*Porzana carolina*) nor a Long-billed Marsh Wren (*Cistothorus palustris*) nor have I heard of one ever being seen there. This is all the more strange, as a marsh not a mile and a half distant is reasonably well stocked with all four birds. This has nothing to do with the subject, it is true, but it has always seemed so singular to me that I do not omit it.

Since the nest first mentioned, I have found a large number; my brother has also done so. In each case we were careful to handle the eggs and place them in different positions to see if the art of fencing would be repeated; but, until this year, the birds simply rearranged the eggs and continued to set. The second and last case of the kind happened while hunting in a different marsh in the early part of last June. I had been hunting for Marsh Wrens' nests but had found nothing of importance but a few Short-bill "decoys," which I marked, until my dog showed me a Virginia's nest containing the remains of nine eggs, which had all been broken in the same manner as those in the first nest. In some of these eggs the damage done amounted to very little more than a thrust clean through, but the majority were badly broken. I am sorry to say that no reason can be given for this case, as the eggs had been washed clean by recent rains, leaving the residue in the bottom of the nest, which proved that the

breaking had taken place some time before I found them. I forgot to mention that, in the first instance, neither the eggs nor the nest were in any way disturbed beyond parting the grass above in order to see the eggs distinctly.

I will add here that if Short-bill "decoys" are found in June, it is well to mark them and pay another visit about the middle of July, as of the nests just mentioned one held seven eggs and another six when visited about a month later. *J. H. Bowles.*

Ponkapog, Mass.

August Nests and Birds.

During the last twenty days of August I found and examined eighteen nests of the American Goldfinch, or Thistle-bird. All were situated in untrimmed hedges of osage orange, growing from eight to fourteen feet high, and within a radius of two miles from town. Other observers note this bird's nesting in orchards, especially in young apple trees, but I carefully explored all the orchards in this neighborhood without finding a single nest of the Goldfinch except in hedges. The nests were usually placed about three-fourths the height of the hedge, on an obliquely ascending branch, fastened around it and smaller outgrowing twigs. One nest was saddled on a horizontal limb and was not supported by smaller twigs, though several thorns aided in giving a firm base to the structure. There is much variation in the construction of the nests, especially in the external depth, which ranges from two to nearly four inches. One nest, made of fine bark fibres, was well rounded and closely woven, and covered without with fragments of gossamer, which gave it a grayer appearance than most of the other nests. Within was a layer of whitish horse hair, and within the latter was the downy bed of thistle. Another nest contained many fibres of a yellowish brown bark, had no hair in its lining, and its cavity was larger and deeper. One

nest had much dried "pepper-grass" woven into its walls. The female sitting upon the nest is not easily alarmed, but when driven from her home she will perch upon an adjacent limb and utter the syllables "*pee pee*," oft repeated in a very plaintive tone. No nests were found containing more than five eggs, which seemed to be the usual full complement. In all cases the eggs were fresh, except one set of four and another of three heavily incubated. Three nests contained young recently hatched, and several more nests were in various stages of construction.

Another late-nesting bird is the Yellow-billed Cuckoo. Within the second and third weeks of August I found seven nests of this species, all in the hedge above described. In all cases the nests were placed on horizontal branches, frequently where two crossing limbs gave a firm foundation for the loose structure made by this builder. The nest was usually at a point above half the height of the hedge. It is a loosely constructed affair, though firmer and deeper than the nest of the Mourning Dove, and quite similarly situated, and the Cuckoo sitting upon the nest, when approached from the rear, may be easily mistaken for the Dove. One nest was built of heavy sticks and roots, some of which were one-fourth of an inch in diameter and eight inches long, laid loosely together, with dried leaves, corn husks, grapevine bark and rootlets intermixed. The cavity was three inches across and one inch deep, though most of the nests were shallower. Another nest had for bedding two inches of corn silk, with many stalks of the corn bloom or tassel laid among the sticks. Four of the nests each contained three fresh eggs, two nests contained two fresh eggs each, and the remaining nest held two newly hatched young, one egg just hatching and one decayed egg.

Late nests of the Black-throated Bunting, "*Dickcissle*," were placed in untrimmed hedges at distances from the ground varying from five to eight feet. I found four such

nests in the hedges on two sides of a square six-acre lot grown with weeds, in the edge of the town. These nests were made externally of dried "pepper-grass," a middle layer or wall of coarse weed fibres, with a lining of fine dried grass or horse hair. Nests found in June were from six inches to two feet from the ground, in low bushes.

The deserting of their nest by some species is a curious phase of bird-life. In August I found many such nests of the Red-winged Blackbird and of the Black-throated Bunting, containing from one to four eggs externally perfect though with addled contents. This has been an eminently dry season, and it is well known that some birds will desert their eggs and even their young under such circumstances. My attention being called to the deserted nests of these two species in this month, a possible explanation has suggested itself to my mind. These species are more or less sociable in their nesting habits, and both cease nesting in our locality early and suddenly. After August 1st the voice of "Dickcissle," heard incessantly till that time, became suddenly silent, though the species remained to skulk in the hedges and weeds for another month. The Red-winged Blackbirds left in flocks about the beginning of August, though they passed and repassed, and are even still here today. With both species nesting came to an abrupt end when many individuals were yet incubating, but the instinct of sociability and migration overcame the maternal instinct and consequently nests were deserted in order that the owners might depart in company with their fellows or join them in their manner of life.

It is a matter of surprise to many students of bird life that the Red-winged Blackbird frequently nests away from the vicinity of water. In this locality orchards are favorite nesting places of this species, without regard to the vicinity of water, though colonies of these birds occupy the swamps also. It nests frequently in hedgerows, such nests being usually solitary, while every orchard

hereabouts has its family or colony of Red-wings.

P. M. Silloway.

Virden, Ill.

The Downy Woodpecker an Enemy of the Codling Moth.

It is an accepted fact, I believe, among ornithologists and entomologists, that the Downy Woodpecker feeds upon the larva of the Codling Moth. I was not aware, though, until a few days ago that the larva were extracted from the apples. Standing beneath a large pipin tree on the morning of July 25, a fine red-headed male Downy dropped down into it; with a loud "good morning" he soon moved out among the outer branches, commenced picking an apple and quickly pulled out a worm and devoured it, then passed along inspecting the apples until he found one with a little pile of excremental pellets on the surface, which told of the presence of the larva inside, which larva was in the stomach of Mr. Downy in less time than it takes to tell it. I watched him repeat the operation again and again. Never once did he open a sound apple.

It seems a pity that the average farmer is so prejudiced against one of his best friends, but then its "that darned little sapsucker" whose harmless boreings he imagines will injure his apple trees. *Benjamin Hoag.*

Stephentown, New York.

Two barrels of Buffalo horns in the rough just received, reminding us of old times. In the rough hardly expresses it; they no doubt have lain on the plains exposed to the weather for the past twenty years. One would hardly believe that by removing the outside they will show a jet black, and will take a high polish.

We believe that the best protection against the ravages of Dermestes, in the case of a mounted mammal or head, is to wash the outside with a very delicate solution of Arsenical soap. We consider that there is absolutely no danger to the health from a specimen so preserved.

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We hope that our readers will bear with patience the delay in our publication.

We publish with this issue August, September and October numbers, which will be followed by November and December combined. The general depression in business strikes hard, especially that which may be considered a luxury. When the wolf is at the door, the demand for land and marine curios and bird notes goes down — or up perhaps better expresses it. A great number of our subscribers have been unable to pay for 1893. When the tide turns we hope to hear from you.

Under the McKinley tariff the duty on glass eyes was advanced from 45 to 60 per cent, and now if the proposed bill is passed it will be 35 per cent. This proposed rate is certainly enough. We were told a few days since that a small maker of glass eyes in this country remarked that there would be no change in the duty on eyes, as he had good friends in Washington who would look out for it. Ye gods, think of hearing such a speech in *broken English*. Perhaps all the American taxidermists are ready to pay extra for anyone's good friends in Washington? We

do not believe in free trade, but in common sense — justice to all.

Harry R. Taylor at one time a favorite writer for the "O. & O.," has began a new enterprise in the publication of *The Nidologist*, a monthly illustrated magazine devoted to ornithology and oology. While published on the Pacific coast, it will contain notes of interest to the collectors from Maine to Florida. The first two numbers are clean and bright. We wish Mr. Taylor success.

One of our exchanges refers to a dishonest Eastern dealer. We do not question but that some one had been "working" the West, but it is just a little harsh on all Eastern dealers to cast suspicion this way. Name the party.

"Your publication is not fit for a boy to read" was the reply we got from the party when we sent a bill for the past year's subscription.

In looking over our correspondence we found where he had written three times for his copy. He was so anxious to get it that he could not wait for us to get it out.

During the past month, a number have sent in their subscriptions for 1894, and in two cases for 1895, notwithstanding they had not received the "O. & O." for 3 months. They will receive it for the full time that they subscribed for.

We distinctly announce that no persons in our employ, while in Boston, are with us now, or are in any way authorized to represent us. We have no office in Boston, and do all our business from Hyde Park.

The eastern papers contain many references to an unusual amount of large game being taken in Maine this season. We presume "Jock" Darling has had his share, for there are reports in circulation that he started in early.

Brief Notes, Correspondence and Clippings.

A boiled deer's tongue is as fine a morsel as one could ask for. Try one. We are having them just now.

Several cub Bears, quite small, have been noted in the Boston market in November.

We understand that the society of the American Ornithologists' Union had a meeting recently in the vicinity of Boston.

A. E. Kibbe, Mayville, N.Y., notes the taking of a set of eggs of Red-eyed Vireo; unmarked, pure white.

A large White Owl was seen near the barnyard at Wonson Farm, East Gloucester, Mass., Nov. 17. One of the boys shot at him twice, but failed to get him.

A little cyanide of potassium put on the tongue of an animal causes almost instant death. It is the most humane way of killing.

Knowing that you are interested in any new discoveries in taxidermy, I will describe a skin just received. A friend in Illinois, a physician, who has imported some Indian game birds, sent me the skin of a black partridge, saying their druggist had tried to mount it and hoped it might be of use to me. The legs had been cut off at the knees, head unskinned and eyes left in. Then a piece of stiff brass wire had been run through the skull, but only reached half way down to tail and was perfectly loose; then some wads of cotton had been filled into the neck, then a wire had been run through base of tail and fastened into a medium sized cork stopper, which had nothing else attached to it. Then a stiff brass wire had been run through each leg and cut off even with sole of foot; a little cotton stuffed into each thigh round the wire, and neither fastened to anything else or even bent. No stuffing of any kind

was put in and body left open. No eyes except the natural ones; one leg and one wing were off when it reached me. In spite of all this I have made quite a bird of it, but for a mounted bird it beat all I ever saw.

— H.

We continually receive letters from parties asking for a receipt for tanning skins. We have tried several and have not found them practical. We do know that "Tannine" will do the work.

We received during the summer two lobsters, one weighing 17 and the other 19 pounds. Both were taken at Cape Cod. Mounted under convex glasses, they made a striking appearance.

The Wood Thrush.

From the time that our great statesman and ex-president, Thomas Jefferson, who "followed this bird for miles without ever but once getting a good view of it," and who, "for twenty years, interested the young sportsmen of his neighborhood to shoot him one," down to the present date of advanced ornithology and oology, much has been said and written in regard to this favorite bird.

His beautiful song and habits and their nests and eggs have been so often described, that it seems almost impossible to say anything further in regard to this bird which would be interesting, especially to the older students of ornithology and oology; and yet I feel it my duty to make one correction in regard to the material of which its nest is composed, for the benefit of the younger students and more especially for some of the older ones, who study more from books than from Nature.

Davie, in his second edition of "Nests and Eggs of North American Birds," says that its nest is "composed of leaves and grasses, with a layer of mud;" and in his third edition, the same author says: "On the outside, it is composed of leaves, grasses, and

stems of weeds, which are gathered when wet and become solid and firm, and between these are tracings of mud."

Now, in all the years of my careful observations, I have never been able to find a single nest of the Wood Thrush which contained any mud except where small patches of it had adhered to the decayed vegetation used in its construction, seemingly more by accident than intention. My correction therefore is this, that the solid part of the Wood Thrush's nest, usually called mud, is composed of very old decayed vegetation and old rotten wood pulp. I do not make these statements to in any way injure Mr. Davie's valuable works, for I prize them highly, and I think it would be proper here to state that various other publications have made the same mistake; and if any ornithologist who seems to differ with me on this subject will carefully examine the nest of the Wood Thrush, I feel sure that he will agree with me that no mud is intentionally used in its construction.

James B. Purdy.

Plymouth, Michigan.

Falcon Harbor, Bowdoin Bay, North Greenland, Aug. 13, 1893.

Editor "O. & O.": I am writing up my correspondence and will drop you a line to let you know that we are here all right. I have been off on a reindeer hunt all night with good success. Mr. Davidson and I spent twelve solid hours, the entire night in fact, although we had daylight all the time, in hunting the deer. We ran across some fifteen or more, but did not get them all by any means. You should have seen us skirting the edge of the ice-cap, climbing crags and fording glacial rivers, clothes and all, with our sealskin suits and rifles. I would like the pleasure of showing you my fur clothing and rifle, the latter a heavy 45 calibre Winchester repeater, the latest and finest make, a gift from Lieut. Peary. I am very sure that both you and Mr. Brown as well would

have enjoyed the day we put in at Duck Islands, where we secured a great number of birds and where I found several pairs of birds nesting, despite the late date of our visit. Previously I had been tramping and collecting in Newfoundland, Labrador and South Greenland, in fact, I shot the first game of the expedition, having secured five Black Guillemots and a Kittiwake Gull at Holsteinburg. At Godham I secured a quantity of Snow Buntings, one being in complete winter costume, several Lapland Longspurs, a fine pair of Guillemots, and four Ptarmigan, the two latter sets forming material for two good bird groups. A large quantity of birds and eggs were also obtained of the Eskimo. Here at Bowdoin Bay we have Snow Buntings in plenty, Ravens, Burgomasters, etc.; last night on our reindeer trip we secured a couple of young Eiders with our rifles, as my repeating shot gun had, of course, been left behind at camp. A large quantity of King Eiders were seen at Upernavik. I would like to send you a lot of natural history notes and tell you something about this country, the ice-cap, glaciers and icebergs—I was in swimming within 100 yards of one this afternoon—and many other things, but I have not got the space nor the time. It is quite likely that a couple of us will organize an exploratory and collecting expedition soon after our return to America; we are studying navigation to that effect, and in addition I am making a study of practical meteorology. I do not know whether I ever spoke to you about Labrador or not, but it is a grand game country; at one place where I visited they had killed 1200 deer since Easter, at least so I was informed by the Moravian missionaries. I must close now as I have got some writing to do for Mr. Peary. You will, I know, excuse this writing as I am writing out of doors in a sealskin suit. I should be very glad to receive a letter from you if you could find time to write.

George H. Clark,

Naturalist to Lieut. Peary's Arctic Expedition.

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No. 9.

Two Days Egging in June.

Last summer, June 14, 3 o'clock in the morning I was at Ames, Iowa, waiting for my friend, to whom I had written that I was coming to spend a few days with him in the field. Knowing that Amon could not be in Ames until about five o'clock, I got an early breakfast at the Railroad Lunch Counter and then started for the woods east of town.

In the east the sky was tinged with red — glorious dawn of day and awakening of bird life. The first note comes from the Purple Martin; the Pewee, Brown Thrasher and Robin soon follows. Now the domestic Cock of the barnyard crows loud and lustily, cooing of doves in the distance and the Cuckoo's notes near by follow in quick succession. Bird life begins in earnest — Robins, Pewees, Thrushes, Whip-poor-wills, Martins, Bluebirds, Kingbirds, Blue Jays, all start up at one time, as it seems, and form Nature's orchestra. From the fields near by come the notes of Meadow Larks, Bobolink and Quail. I stand still enraptured at the beauties of nature that surround me; suddenly two wolves come running along the ravine at my left and arouse me from my reverie. Seeing me, the shaggy fellows scamper off on a gallop and cross the railroad track further down, just as the west bound passenger comes thundering along.

Rap a tap tap. The Woodpecker is at work getting his breakfast; he certainly proves the old adage about the early bird catching the worm to be true. The mosquitoes by this time were out in full force, and "on to

their job," so I concluded to retrace my steps to the station. Arriving at Ames a few minutes later, I was in time to meet my friend.

The drive to his home, ten miles distant, was a delightful one. Willow and osage hedges were scattered all along the road — favorite nesting places of Thrushes, Doves, Robins, etc.

The first set of eggs that we collected on the way to Amon's home was a Catbird's, three eggs in set, nest placed in willow.

Set II. Mourning Dove; the nest was placed in osage hedge. The Turtle Doves are common in our locality and can nearly always be found feeding in country roadways.

Set III. Mourning Dove; nest in osage. The nest contained only one egg, very small in size, .75 x .55. My friend has in his collection one set of three eggs.

Set IV. Brown Thrasher; nest was made of twigs, dried leaves, strips of bark and fine roots, lined with hair. Three eggs in set, thickly sprinkled over the entire surface with reddish brown specks.

Having put this set in my collecting box, we drove along leisurely until the notes of an Oriole attracted our attention.

"There he is," said my companion, as he pointed to the pretty "Lord Baltimore" swinging on a leafy bough, "but I do not see the nest."

We tied the horse and began to investigate, but could not find the nest.

We had been looking for the nest about five minutes, when a pretty barefooted country lassie came out of a little cottage that stood by the roadside. Luckily for us, my

friend was acquainted with the fair maiden, and asked her if she could tell us where the Oriole's nest was. For reply, she pointed to a limb right over our heads, and sure enough there swung the purse-shaped nest of the Baltimore Oriole with the female on the nest. The nest was made of strips of fibrous bark, strings, hair and wool woven firmly and neatly together and fastened to a slender limb, showing the marvellous skill by which elegance and strength are combined. The nest and three pretty pale blue eggs, spotted and lined with umber, are now in my collection. Two of the eggs are finely lined with umber on the larger end, the other one is heavily marked on smaller end.

After taking set V., we drove along briskly and were at Amon's home in half an hour; here we rested a while and then started out for a day in the fields and woods.

Set VI. Kingbird; four eggs in set, creamy white, one spotted on larger end with rich umber and chestnut red, on smaller end few spots of chestnut. The others spotted with chestnut red and lilac.

Set VII. Kingbird; two eggs in set, blotched and spotted with umber, chestnut red and lilac.

Set VIII. Mourning Dove; two eggs in set.

Set IX. Brown Thrasher; three eggs in set, ground color, pale greenish, with minute specks of reddish brown over the entire surface.

Set X. Red-winged Blackbird; four eggs in set, oval, pale blue, dotted and lined with umber and reddish brown on the larger end, with shell markings scattered over the surface.

Set XI. Catbird; four deep bluish green eggs in set. Nest made of dry leaves, sticks and twigs, lined with fine roots and grass, placed on raspberry bush, three feet from ground.

Set XII. Green Heron; five eggs in set, light greenish blue, elliptical. The herony is in a grove of maple trees on the Gibson farm and has been their breeding place since 1888. Squaw creek is the most important

body of water near the herony, lying about one mile to the south-west. Near the creek and between it and the herony is a large pond; it is here that the herons get frogs and the larvae of several insects, especially those of the dragon fly, which lurk in the mud. The Green Heron is common in Boone and Story counties and can always be found along the Des Moines river and Squaw creek, from the latter part of April to about the first of September.

During my summer rambles I have often seen the silent and motionless fellow stand like a statue, with his head drawn in, on the lookout for an unfortunate frog or minnow, suddenly giving a quick, sure stroke, and all is up with poor froggie.

My friend took eggs from the "Gibson Farm Herony" June 3, 1891; a set of five on May 24; and set of six June 6 of the same year. In 1892 he took a set of four.

This is the only place that I know of in Story County where the Green Heron breeds.

Set XIII. Yellow Warbler; four eggs in set, greenish white ground color, spotted, forming a wreath around larger end, with rich umber, reddish brown and lilac gray. Nest cup-shaped, made of slender stems of plants, grayish fibres and hair, lined with horse hair and plant down, fastened on the side of limb and small twig.

Set XIV. Yellow Warbler; three eggs in set, ground color a decided green, heavily marked on larger end with rich umber; the markings on one of the eggs form wreath on larger end. Nest cup-shaped, made same as the one just described with the exception of the lining, which is composed mostly of horse hair and very little of the plant down, which forms the bulk of the lining of the other nest.

Set XV. Brown Thrasher; three eggs in set, color same as set IX.

Set XVI. Bob White; eight eggs in set. Nest placed on ground, near fence; was made of dry grasses, weeds and leaves. Found another nest (deserted) with four eggs,

Set XVII. Yellow Warbler; five eggs in set. Nest and eggs like set XIII.

Set XVIII. Yellow Warbler; four eggs in set, beauties; they are in the "Amon Shearer collection," so I cannot describe them.

Set. XIX. Catbird; four eggs in set; in the "Amon Shearer collection."

This was the last set that we took, and by 6 o'clock we were home, feeling well satisfied with our first day's eggging. The evening was passed pleasantly in telling stories, and once in a while friend Amon, accompanied by his sisters, would favor us with sweet music.

It was along towards the "wee hours" when Amon and I "turned in" for the night. Although tired and sleepy we could not help talking about sets taken during the day. Amon had just finished telling me about a "lucky find" the year before. In return I told him of my first set of Great Horned Owl eggs. I must have been rattling away for about ten minutes, and when all was told I asked my companion what he thought of it. No answer—his thoughts had gone to the "happy hunting ground."

Our plan was to be out early the next morning, so I followed his example and—snored.

Amon was up bright and early the next morning; had his farm work done and collected set of Catbird eggs before I "tumbled out" of bed.

The set of pretty Catbird eggs was lost; it happened this way:

When Amon found the nest in the orchard, he took the eggs and thought to surprise me with his early find. Opening the door of the bedroom he placed them on the floor between the door and bed.

About ten minutes later he returned to see if I was up (of course I wasn't); then he walked right in intending to wake me, unfortunately forgetting about the Catbird eggs on the carpeted floor. Of course he stepped on every one of them.

After breakfast we started out. Our first find was four pretty eggs of the Brown

Thrasher; nest was placed three feet from ground in willow.

Set XXI. Yellow Warbler; this set of fine eggs is the lightest in color that I have ever seen. Three of the eggs have a wreath on the larger end, formed by faint spots and blotches of drab brown. One has tiny specks of lilac reddish brown and umber. The other egg is pale blue, with only three tiny dots of brown. Nest same as XIV.

Set XXII. Chipping Sparrow; four eggs in set, bluish green, spotted with dark umber, purplish and gray lilac, the markings forming a circle on the larger end of two eggs. Nest built in wild plum tree and made of fine grasses, roots and fibres, lined with horse hair.

Set XXIII. Barn Swallow; five eggs in set, white, marked with spots of bright reddish brown over entire surface. Hundreds of nests of this beautiful swallow were placed under the eaves of the barn where this set was collected.

Set XXIV. Barn Swallow; six eggs in set, color same as XXIII.

We took the nest belonging with this set of six eggs because it was a fair specimen of the Barn Swallow's work. It was composed of pellets of mud mixed with grasses and lined with feathers.

Set XXV. Yellow Warbler; four eggs in set, greenish white ground color, spotted with umber, reddish brown and lilac, forming wreath on large end. Nest cup-shaped, made of stems of plants, fibres, hair and plant down.

This is the last set that we collected, going home early so could we blow them before I returned to my home.

The season was late for a successful collecting trip, but the ones we did get are beauties and much thought of by Amon and me.

Carl Fritz-Henning.

F. H. Holmes, Berryessa, Cal., called on us while on his return trip from a pilgrimage to Harry Austen's "den."

The Pelicans of Michigan.

At rare intervals we read of captures of Pelicans in Michigan, and these records have assumed such proportions as to lead me to think that the White Pelican, at least, is no more to be considered a great rarity among us. Undoubtedly this species is to be found in our state each season, but as it may select wild and little known quarters, it rarely comes to the notice of competent observers.

The species was known in our upper peninsula, about 47 degrees, as long ago as 1856. Two specimens were shot in St. Joseph County about 42 degrees north latitude. One was taken in St. Clair County, 43° N. lat. 82° 30' W. long., and is now, I believe, in the university museum. Mr. Adolph Beerstecher, of Centerville, Michigan, has mounted state specimens. Then on page 143, 1892 "O. & O." is recorded a capture at Dorr, Allegan County, Michigan, about 43° N. lat., 85° 30' W. long.

The White Pelican breeds to the west of our state, and was reported from N. Dakota for many years, and undoubtedly nests there now. It also reaches in its summer range well up into the British Possessions. As it is preferably a fresh water feeder, it follows that there are few, if any, sections of our possessions where it may not be found, at least as an occasional straggler. The Mississippi valley must be, in the main, the course of migration to those birds nesting in British America and the northern confines of our states; and it follows that singles, pairs, and perhaps occasionally small detached flocks, will be seen during spring and fall in Michigan. It is not improbable that the species was once found breeding in our upper peninsula.

The Brown Pelican has been embraced as a state species by a single collector. The late W. H. Collins, of Detroit, Michigan, a most reliable observer and capable taxidermist, wrote me that a specimen was captured near Romeo, Macomb County, in the spring

of 1882. If this record is correct, and I have never had cause to doubt Mr. Collins' observations, then it is remarkable as a northern note, but more surprising as a record from the interior, for the Brown Pelican is eminently a salt water bird. The locality of this capture, about 43° N. lat. and 83° W. long., is certainly surprising. However, reasoning from analogy, we have no reason to doubt this record, either from observations on the same species near to our state, or from notes of many other species of salt water birds which straggle to the great lake region. Moreover, we know that this bird does straggle over the lower course of the Mississippi and its tributaries, and we cannot as yet give the limits of this occasional variation. *G. Sirrom.*

A Few Observations on the Crested Flycatcher.

The Crested Flycatcher is quite common in this district, and as I have taken a great interest in these birds, I concluded to form a better acquaintance with them this year, so I placed a box of the right dimensions in a large oak tree in my back yard. The first Flycatchers were seen here about April 27. On May 13, as I sat on the back porch, a pair of Crested Flycatchers came and lit in the tree where the box was. From this time I watched them carefully.

I did not see anything more of them until May 19. I woke up and looked out to see the birds, for I heard them from the tree. Yes, they were carrying the first material into the box. By the 22d the nest was completed to my notion, but the necessary article had not yet been found. The box was half full of grass, chicken feathers, fish scales, and rubbish; but the snake's skin was wanting. On the 26th, however, an ample supply was found and the nest seemed to be going through a renovation, for certain articles were thrown out and the snake's skin put instead. After about a double handful was added the nest was complete. On the morn-

of June 2d the first egg was laid, and on June 3d another and the third on June 4th. This completed the set and the process of incubation was commenced.

The eggs were as heavily marked as any I have seen, which fact made me wish to take them, but I concluded to let them hatch and feel amply repaid that I did.

The female sat the longest on the eggs and when she was tired she stepped out on a limb, uttered her peculiar cry and flew away. The male generally came around before she returned, then she would soon relieve him. On the 21st of June the eggs hatched and the young were fed by both parent birds. The time it took to hatch the eggs, as you may see, was seventeen days. I don't know whether this is a little fast or slow. The young were fed on small grasshoppers, katydids, and other small insects.

There were innumerable skirmishes with Blue Jays. Each one, however, turned out a victory for the Flycatchers. They would dart at the Blue Jays in much the same manner their cousins the King Birds do. The young left the nest on the afternoon of June 1st. They remained about the place for some days and then left. I think these birds did very well to hatch and rear their young under such disadvantages, for there was a yard of seven cats that watched them very attentively, and every bird escaped from their clutches.

John C. Brown.

Carthage, Mo.

A Vacation in Pennsylvania.

The twelfth of June saw us seated in a D. L. & W. train, speeding across the flat Jersey country toward the Water Gap on the Delaware. Previous to 1893, my summers had always been spent in the mountains of northern Vermont, and this southern country of Jersey seemed almost tropical. From the car window we saw, instead of the familiar stone walls of Vermont, picturesque snake fences suggestive of Jersey lightning, though covered with graceful vines. I afterwards

found those very vines far from pleasant. "But that is another story."

As our train sped on, we saw the distant Blue Ridge come nearer and nearer, until we found ourselves looking out on as charming a country as can be found anywhere. The hills were not high compared to real mountains, but they were wonderfully beautiful, being craggy and wild, covered with forest, broken here and there by a little farm. As we sped through the woods, I could imagine it when quiet, with the cautious Fox standing on some log, looking up and down the track, while a Grouse clucked in alarm at sight of him. After a most glorious ride, and what was very satisfactory to the inner man, a very good dinner, we reached the Water Gap. My brother had sent a carriage up from the city, and we spent a few minutes in tying it securely to Mr. W.'s big wagon; then stepping in, we had a grand twenty-mile drive through the fragrant mountain air, saturated with sunshine. As we drove along the ridge, we looked down into the Delaware, alternating in deep still pools and noisy white rapids. Farther on we crossed that famous old trout stream where gentle Thaddeus Norris loved to fish, the Brodhead. As we rounded a curve beyond it, a little flock of dainty Carolina Doves rose with a soft whistling of wings, and, flying up the hillside, we heard them cooing to each other with that bell-like plaintive note—wellnigh a song. Once on the plateau, we drove through a country dotted with farms, with nut trees and orchards along the road. There we found the gaudy Baltimore Oriole in quantities, all busy as bees. We saw a few of Balty's shy cousin, the Orchard Oriole, and I heard his song for the first time, though he was an old friend of my brother's.

As we rattled along over an excellent road, we made inquiries of our host, Mr. W., as to getting a horse for the summer. We found our advent had created quite a stir, and all the old nags of the country had been dieted and physicked for a week past. As the re-

maining miles dwindled, the sun sank lower and lower, and when we reached the Delaware valley again, at the Bushkill, the sun was setting, and we heard the wierd *piank* of the Night Hawks overhead. As we drove through a shady copse, we heard the liquid notes of Whip-poor-will, and soon the valley was filled with their sadly musical notes. Just before we finished our drive, we heard a ghastly gurgling scream, or groan, repeated several times, and looking toward the moonlit sky we finally saw a small Owl fly out on silent wings. I have never identified any owl notes with their authors, but I took this to be a Screech Owl.

The next morning I was awakened by a rollicking song, and saw a Red-eyed Vireo singing away within a couple of feet of my open window. Hearing a strange song, I dressed hastily and went exploring. It was a perfect summer morning, an ideal time for an ornithologist to be awake. The air was filled with music, and everything had an air of enchantment, in the early sunlight, that made it seem more than ever like a foreign country. Surely, I thought, I shall like Pennsylvania more than Vermont; and now the summer is over, I am inclined to think it *is* a fine place and Pike County its best corner.

Hunting up my strange song I found it came from a gorgeous Scarlet Tanager, perched on a dead locust limb, within twenty feet of the piazza. I looked around for his nest, and soon found it, a frail bunch of sticks with the mother bird showing through it. It was placed in a flat crotch of the same tree, in a bunch of verdure hanging directly over the road, not over fifteen feet up. As I watched the quiet little matron, I heard a familiar call, that sad, simple little refrain, *pee-wee*, followed by a flutter, and a quick snap as a moth went to its doom. I soon found Pewee's nest, a dainty lichen-covered cup, in an upright crotch in a limb almost at the top of the next locust, along the fence. Looking lower, I saw a Chipping Sparrow at work on a nest, low enough to reach by stand-

ing on the fence. After the little spizellae came into the world, I often got up and watched them, and when they flew I took the nest.

Going round the house, I saw a Phoebe fly hurriedly away from the piazza, and it took little search to find the clumsy mud nest on the cross beam, with its five little gap-mouth birdlings. We watched those all summer, too, and missed the little black-eyed mother when the brood flew, and she flew with them. In a big basswood at the back of the house, I heard an Oriole singing away, and presently he showed me his swinging cradle, not a whit afraid for me to admire it from the lowly station I occupied. As I reached the corn crib there was a clatter of wings and a Blue Jay went off up the mountain screaming *jay, jay, jay*, till the mountains mocked him. In the orchard behind the kitchen I heard a sharp *chebec, chebec*, and found the Least Flycatcher, looking sour and glum as though his breakfast was wanting. I began to sympathize with him, and went in to prospect, scaring a dainty little Hummingbird from the glowing nasturtiums.

After breakfast my brother and I started off fishing, and though we had a very good time, we saw nothing of interest to the "O. & O." We found Brown Thrashers everywhere; Catbirds nearly as common, and Baltimore Orioles in every orchard. I think the best way to give an idea of what we found would be to tell what we didn't find. I never saw so many species of birds in so short a time in my life; from the "canaille" of birds to the "noblesse," all had their representatives. The common Sparrows, as Chippy, Grasshopper, Field, Song, Savanna, were dancing around the vines in the fence corners, and solitary Kingbirds sat haughtily on fence poles. The glorious melody of the Wood Thrush came from the forest across the field, while the Oriole and Song Sparrow, with homelier melody, swelled the chorus.

The warblers were very few as residents. The omnipresent Golden Warbler, the to me

rare Parula, were the only ones in the woods and fields. In the swampy thickets the Maryland Yellow-throat and Golden-crowned Wagtail appeared, while on the river banks the Redstart and Water Thrush held sway. The Bobolink was unknown, the Cowbird not common, but both Orioles were everywhere if you were in their confidence enough to find them. Save the Red-tailed Hawk and an occasional Sharp-shinned or Red-shoulder, and the lordly White-headed Eagle, the Hawk tribe was scarce. What three or four species did show up were few in number. The Flycatchers were all there (I mean the common ones of this latitude and longitude) except Traill's and the Yellow-belly. I saw one Olive-sided Flycatcher, but the rest, even the Acadian, were fairly common. Blue Jays were rampant, but Crows scarce. I found no Grosbeaks, but only Chewink, Goldfinch and Indigo, besides the plebeians of the field. Ruffed Grouse were thick, Quail and Woodcock neither rare nor common. The noisy and meddlesome Robin, whom I heartily dislike, was there too; and of the Woodpeckers, the Downy, Hairy and Flicker were common, the Pileated rare, and the rest unknown to me there. Chickadee was a rare resident, though common back in the coniferous forest.

The Red-eyed and Warbling Vireos were in great numbers, but those were the only ones of their family. The common House Wren was the only one I found, though I looked for others of the family. Barn and Eave Swallows were common; Bank and White-bellied rather rare. Chimney Swifts were in great numbers in the many deserted houses. The Carolina Nuthatch was fairly common; the Carolina Dove very common.

On the islands of the river we found the Spotted Sandpiper and Green Heron. Here also the dashing Kingfisher caught minnows and sprung his rattle triumphantly. I think that is a pretty accurate list of what birds I found resident. There are several rare residents I am not at all sure of in their identifi-

cation, so I leave that till later. I have said nothing about the migrants; they will come later.

Now about the White-headed Eagle. I've heard them slandered most foully, even in the school reader, which should be patriotic. I found these magnificent birds fairly common, two pairs being within five miles, and young ones strung around everywhere. There were a few Ospreys in the river, but never have I seen them molested by the Eagles. Perhaps it was because dead shad were so plenty, but we must give the Eagle his due. I never saw those Eagles quarrel with anyone, even a Kingbird, whom Job would have squabbled with, save one trespassing Eagle, who quarreled over a dead fish with one of our young Eagles. Then there was screaming and a superb chase, wheeling round in magnificent curves, flying with a speed that seemed incredible until you heard the pinions roar as they wheeled. Finally the trespasser fled — no, not fled, he majestically sailed away, "every inch a King."

I know of no sight more sublime than that of an Eagle soaring in one of those contemplative moods they sometimes have, soaring in superb great circles, slowly rising until the gazer, fascinated, finds the superb fellow nearly invisible, and then to hear the wild call to the queen, as the royal pair sail away, swift as arrows, to their roosting place. I believe that sight would make the most painfully practical person feel a gush of delight—that they had been permitted to see our national emblem under such perfect conditions. I suppose he is a thief and a robber, but he is true to his mate, and has so many noble qualities that one must forgive the little inconsistencies. *Herbert W. Congdon.*

Capen's "Oology of New England" is nearly exhausted. We know of only 6 copies in the market; we have 4 and F. H. Latin 2. The price is \$15, colored plates. The plates have been destroyed,

Ducks in Southern Wisconsin.

Probably the greatest sport to be had by the hunters of this locality is with the Ducks. Nothing, in bird shooting, can be compared to ducking, especially shooting over decoys when the birds are flying well. We have quite a list of ducks here, which I give, hoping that it may be of interest to ornithologists and sportsmen alike. To me it is always an interesting group in either way.

1. *Merganser americanus*, American Merganser; Sheldrake. This bird is a tolerably common migrant, but is not much hunted on account of the rank, "fishy" taste of its flesh.

2. *M. serrator*, Red-breasted Merganser. A rare migrant; table qualities same as last.

3. *Lophodytes cucullatus*, Hooded Merganser; Fish Duck. An abundant migrant, and in the fall very fair eating, although in the spring the flesh is very fishy, as with the two foregoing Fish Ducks.

4. *Anas boschas*, Mallard, "Green-head" (♂). As fine a table Duck as we have; rather a common summer resident and an abundant migrant. Rarely decoyed, but many are shot in the creeks and ponds before the sea-ducks arrive. Late in the fall they may be found in the corn-fields.

5. *A. obscura*, Black Duck. A tolerable common migrant, having the same general habits of the Mallards.

6. *A. americana*, Baldpate. Common migrant. Does not decoy very well and is usually taken with long shots. Very good eating.

7. *A. carolinensis*, Green-winged Teal. This pretty little Duck is a common migrant, arriving early, so as to afford good shooting in the rice marshes and small ponds, along with the Blue-wing and Wood Duck. Often found feeding in company with the Coot and Grebe.

8. *A. discors*, Blue-winged Teal. A common summer resident; fine table bird.

9. *Spatula clypeata*, Shoveller, Spoon-bill. A rare summer resident and tolerably common migrant. A few summer in retired places and are shot now and then during the fall. Said by some sportsmen to be "fools" and easily deceived, but all that I have ever seen were very wary. A fine table fowl.

10. *Dafila acuta*, Pintail, Sprig-tail. A tolerably common spring migrant but very rare in the fall. Not very often secured of late.

11. *Aix sponsa*, Wood Duck. This Duck is an abundant summer resident of the wild-rice marshes and retired ponds, and many are shot in the early fall, the sportsmen turning out for them on September 1, as they do for Chicken farther west on the first day of the season. Rarely taken in full plumage.

12. *Aythya americana*, Redhead. A tolerably common migrant. Decoys well in the spring off the points of the larger lakes.

13. *A. vallisneria*, Canvas-back. Tolerably common migrant, but rather late. Not many are shot.

14. *A. affinis*, Lesser Scaup Duck, Blue-bill. Rare summer resident, but abundant migrant, sometimes in very large flocks. Decoys well and gives good shooting.

15. *A. collaris*, Ring-necked Duck, Blue-bill. A migrant with the last, and in about equal numbers.

16. *Glaucionetta clangula americana*, American Golden-eye, Whistler. Very rare summer resident and abundant migrant. Decoys well, often diving or swimming into the stool.

17. *G. islandica*, Barrows' Golden-eye. An accidental migrant. Four were taken in the spring several years ago on Delavan Lake.

18. *Charitonetta albeola*, Bufflehead or Butterball. An abundant migrant, easily decoyed. A very beautiful little Duck when in full plumage.

19. *Oidemia americana*, American Scoter. A very rare visitor during the migrations. A flock of six appeared this fall on November 12.

20. *Erismatura rubida*, Ruddy Duck. A common migrant. Dives well, often coming up in the decoys when you are looking in the air for your game. Easily secured, a quick shot usually bags the whole flock.

21. *Chen hyperborea*, Lesser Snow Goose. Rather common migrant, though rarely taken.

22. *Branta canadensis*, Canada Goose; Common Wild Goose. An abundant migrant. Only a few are taken as they light usually in the center of the lakes or fields, where they are not easily secured.

In the above list no Ducks are given as summer residents where only an occasional winged bird remains over from the spring migration, as is not rarely the case.

Ned Hollister.

Delavan, Wis.

Notes from Maine.

One day during last May I was told that a boy had collected a set of Mocking-bird's eggs. I immediately went to see him and was shown an egg. It was one of four, the others having been swapped off, as he told me, and they looked to me, so far as I could remember, much like the Mocking-bird's eggs that I had in my collection. He had destroyed the nest and refused to tell me where he had found the birds; but I told him to look out well for a second set, and to let me collect it, as I wished to get birds and all. When I next saw him, however, he said that he had already collected the second set and was saving them for me. I got the eggs and also the nest, but the birds were nowhere to be seen. On closely comparing the eggs with those of the Mocking-bird's, I found them entirely different, but not so much so as to make me think them anything else. Only a week after I found out that I had made a bad mistake, for I found a pair of Loggerhead Shrikes around the place where the nest had been. The four eggs, when compared with a set of the White-rumped,

showed no difference at all. The nest was declared a Shrike's on first seeing it and without being told about it by a friend, who is very familiar with the breeding of the White-rumped. It was placed in the middle of a field about seven feet up in an apple tree. It is made of horse-hair, cow-hair, cotton, twigs, grass, string and feathers, one of which on the bottom (outside) of the nest looks as if it may have come from one of the birds.

On June 10 I collected a fine set of five eggs of the Purple Finch. This bird is not very rare, but its nests are not often found, as they hide them very nicely in the top of some thick tree in the woods. I found this one, however, in an apple tree, while looking for something else. It was utterly impossible to see the nest farther off than two or three feet, so well was it hidden.

June 10, a set of Blue-headed Vireos was found in a maple within fifty feet of my home. The nest was only slightly pencil and was about ten feet from the ground and seven from the trunk of the tree. When I took the set, the bird stayed on the nest until my hand was so near that she hit it as she flew up. Four eggs.

On this day I also got a set of Least Flycatchers with six eggs in it. The nest was, if anything, a little smaller than usual and the eggs were almost crowded as they lay in it. I never before heard of a set with more than four in it.

I also got last summer two sets of Indigo Buntings—one with three, the other with four eggs—and a set of Yellow-billed Cuckoos with two eggs.

In writing before of the Loggerhead Shrike, I intended to say that on April 21, 1891, I shot a fine specimen, which is now in the collection of Rev. Mr. J. B. Caruthers, of Berlin Falls, New Hampshire. The bird was all alone and seemed to be looking for prey of some sort when I shot it.

John L. Goddard.

Saco, Me.

THE
ORNITHOLOGIST AND ZOOLOGIST
 A MONTHLY MAGAZINE OF
NATURAL HISTORY,
 ESPECIALLY DEVOTED TO THE STUDY OF
BIRDS,
 THEIR NESTS AND EGGS,
 AND TO THE
INTERESTS OF NATURALISTS.

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 If you fail to receive it, notify us.

Will the correspondent who sent us some time since notes, five pages, headed *Larus Franklinii*, please communicate. We accidentally separated it from his letter, and wish signature for publication.

INTERESTING TO NATURAL HISTORY COLLECTORS.

Postmaster Dayton has been informed that a proposition submitted by the Postmaster General to the International Postal Bureau to admit specimens of natural history to the international mails at the postage rate and conditions applying to "samples of merchandise" has been rejected by a vote of the countries composing the Universal Postal Union, and consequently all such specimens (except those addressed to Canada or Mexico) must be fully prepaid at letter rates; and dried animals and insects cannot be sent under any conditions, being absolutely excluded by the provisions of the Universal Postal Union Convention, regardless of the amount of postage prepaid thereon. This will prevent the exchange of such specimens between collectors, natural history museums, etc., by international mails, and no package known to contain them can be

accepted at a post-office for mailing to foreign countries.

Natural history specimens (other than dried animals and insects) may be sent to Canada as "merchandise" at one cent an ounce. They may also be sent by parcels post to Mexico and to all other countries with which the United States has parcels post conventions.

Brief Notes, Correspondence and Clippings.

And now they are having a *Gay* old time of it in Maine over the question of stocking up of the state with fowls of the air and beasts of the fields.

"Hornaday's Taxidermy" is sold all over the world. A letter just received from India mentions it as being "the book." It is a work that should be in the hands of all sportsmen,—as the time would certainly come when a reference to its pages would be worth several times the cost. There has been no book published on the subject that begins to compare with it. Sent post paid from this office for \$2.50.

Is it Mount Tacoma or Ramier? is the question that seems to be agitating people in Tacoma. The Tacoma Academy of Sciences says it is Tacoma, and that settles it.

The "Cyclone" mouse trap for the taking of small mammals, is the best one in the market. Every naturalist should have them on hand, as for the common mouse they are the trap of the day. Two by mail post paid for 25 cents.

During the heavy storms this fall two records were made of Man-o'-War birds on the New England coast.

Editor "O. & O.": The "O. & O." came the other day and now lies on my desk completely read through. Where have all the old writers gone? I still see Widmann is in

the ring, and I believe Preston had something in the June number; but where is J. M. W. and his "hawky" (Red-tail) notes. He has not gone back on the Red-tails, has he? Why not something from his quill again? Let Preston tell us how he found White Cranes' eggs in northern Iowa again—would much rather they were another set—and stir up the rest of our old writers.

Shooting along the Illinois has begun, in fact it never stopped. Sandpiper and Yellow-legs were quite plentiful along the Illinois not long ago, and the former are now. Jacks have arrived in goodly numbers since the rains, and the market has an abundance of them.

W. E. Loucks.

Peoria, Ill.

The "Forest and Stream" issue of December 21 contains a photograph of a pair of Capercaillie mounted by George E. Browne of Dedham, Mass., who is connected with us.

NOTES FROM BERRESSA, CAL.

I notice in July "O. & O." a correspondent from Riverside asks about the range of the Black Rail. I have seen several on the marshes at the southern end of San Francisco Bay. While walking along a slough at high tide on December 1, 1892, I flushed two together and secured them both. On February 29, 1892, I secured another, and also a Yellow Rail. At one spot on the marsh near a small stream of artesian water I have seen specimens of the Black, Yellow, Virginia, California Clapper and Sora Rails. I would like to know how far west the Yellow Rail has been reported as occurring. I have been informed that it has never before been taken in California.

I have taken two and have seen one or two others. I see Mr. F. H. Renick, of Seattle, Washington, speaks of having never seen the Black Swift on any but fresh water. A couple of years ago a friend of mine shot several flying about the cliffs on Monterey Bay, and I have seen those and the White-

throated near the same place, often in the company of Cliff and Violet-green Swallows.

R. H. Beck.

The Flight of Birds — A Reply.

In response to Mr. James Smith's query in the July ORNITHOLOGIST AND OOLOGIST, I would say that the true Falcons are perhaps the swiftest aerial navigator among the Avian fauna. As to species, we are led by extensive personal observation to doubt if any bird can excel the Duck Hawk in swiftness of flight. While seeking and taking the eggs of this Falcon we have had ample opportunity to observe its habits. The rapidity of its progress when upon the wing is almost inconceivable. At one moment it may be within range of an ordinary shot-gun; in another, it is a mere speck in the sky; and in a third, it is lost to human vision. Again it may be observed to shoot downward from the region of the clouds with a velocity comparable to that of an arrow leaving the bow of an archer. The Duck Hawk is remarkable not only for its swiftness but also for its power of flight. It is probable that this bird is capable of traveling at a rate of one hundred and fifty miles an hour, and it has been ascertained with certainty that it can maintain for a considerable time a rate of at least one hundred miles an hour. Hence it is not strange that it is often seen far from any of its native haunts and breeding places—a fact which gave it the name Peregrine, from the Latin *peregrinus*, "a wanderer."

Among other birds which possess great power of flight are the Petrels (*Procellaria*) including the Albatrosses, the Stormy Petrel, etc., which maintain themselves upon the wing for long periods of time. Other oceanic birds are remarkable for both power and swiftness of flight. An Eider Duck has been known to cover ninety miles in an hour.

Those acquainted with the principles and mechanism of aerial navigation can demonstrate by physical examination and dissection of the species mentioned that they are ana-

tomically constructed for great rapidity and force of flight.

For a full description of the nesting habits of the Duck Hawk, the reader is referred to an article by the writer entitled "Taking the Eggs of the Peregrine Falcon," in the OOL-OGIST for June, 1893.

J. Hobart Egbert.

Notes on the Sharp-shinned Hawk.

The Sharp-shinned Hawk is a resident with us, but not at all common, especially during the summer months.

I have only succeeded in finding two nests in a number of years' collecting.

The first was found about May, 1878, in a grove of small pines; situated in one of them, and about twenty feet from the ground. It contained five eggs, which I secured.

About two weeks later, in passing near the nest, I decided to take another look at it.

I did so, and also took a second set of eggs from it. There were four in this clutch, and they were smaller than the first ones and not so finely marked.

My second nest was found May 29, 1892, and discovered to me by the actions of the birds, as when I was about fifty yards from it they both came flying about me and became very noisy.

This nest was also in a pine tree, close in to the trunk and resting at the base of a limb.

It was thirty-five feet up, and composed of pine twigs, without lining of any kind.

While I was at the nest both birds sat in a tree about twenty feet distant and seemed very much disturbed at my presence. Several times they darted close to my head and perched within a few feet of me, but at the least movement would fly off a short distance.

The eggs, which were very slightly incubated, were five in number and are as follows, the ground color in all being a grayish white:

No. 1. A little more pointed than any of the others. Marked mostly about the centre with a wreath of burnt umber and russet, the

rest of the egg being covered with small light brown spots: 1.41 x 1.21.

No. 2. Marked with a broad band of burnt umber and russet in the centre, the rest of the egg being covered with small light brown specks: 1.41 x 1.19.

No. 3. About one-half marked with burnt umber, forming a sort of cap to the egg, the balance slightly marked with small spots of light brown: 1.41 x 1.17.

No. 4. Marked about the larger end with burnt umber and russet, the rest of the egg being covered with splashes and spots of light brown: 1.40 x 1.21.

No. 5. In this egg the ground color is a clearer white than in any of the others. Marked around the centre with a wreath or band of russet and a little burnt umber. This is the only egg in the set showing any lilac, it having a few splashes of this color, principally toward the larger end. It is by far the most handsome egg in the clutch.

In all of them the umber looks as if it had been slightly washed in some places.

Thinking I might take a second clutch from this nest, as in the one previously found, I went back to it about two weeks later, but it was apparently deserted as there were no birds to be seen.

I also looked at it this last spring (1893), but without success.

Two other nests, of which I have record, were found in pine trees, one in a cedar tree, and one was in a hole formed by the rotting of a limb of a chestnut tree. This latter was occupied for two consecutive years and then the tree was cut down.

All of these nests were in Baltimore County, Maryland.

William H. Fisher.

Baltimore, Md.

E. W. Norcross, of Boston, while on his vacation in Vermont, shot a beautiful white Robin. It seemed to have been deserted by its family and was flying about the fields alone.

Brewster.

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— AND —

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No. 10.

A Nest of Hen Hawks.

Dr. Merriam says that Fish Hawks, A.O. U. 364, do not breed as far up the Connecticut river as Hartford, but as they are always very common here about the middle of April, I thought he might be mistaken. So I watched the meadows where they fish pretty closely, and also asked my brothers to keep an eye open for big nests. As what I am going to write has nothing to do with Fish Hawks, I may as well say right here that, though I once saw one with weeds on her feet, we didn't find any nests, and I guess that Dr. Merriam knows what he is talking about alter all.

The boys had been fishing for Alewives in these meadows and, April 22, they told me that they had several times seen "a big bird, not a Fish Hawk," fly out of a large nest which I had watched for the last four years without seeing it used.

So I got my climbers and rowed up there. The water sometimes covers this place to a depth of fifteen feet, and there is always more or less there every spring. I saw the bird, a Red-shouldered Hawk I found later, and on going up to the nest saw that it had been repaired a trifle and contained four eggs. They were a dirty white, more or less spotted with brown, mostly in small spots but some blotches. The spots are no thicker at one end than at the other. The eggs are about the size of a small hen's egg, rounder perhaps. They were almost exactly like a set of five, well incubated, that I took from a neighboring tree on the 30th of last April. They measured 2.16×1.66 ,

2.20×1.68 , 2.18×1.70 , 2.04×1.65 , and 2.16×1.68 .

By the way, it took me nearly two weeks to blow one of those eggs. I had to fill it with water and let the infant soften before I could get him out.

As I had those five already, I decided to leave this set in the nest and watch them. I found in the nest, beside the eggs, about six inches of the tail of a grass snake. The old lady had taken it to bed with her!

I went away as quietly as I could and came back again on the first of May, but the eggs had not flown yet. But on the 8th, when I went next, I thought something was the matter before I got to the nest, for the female called up her mate, who stayed most of the time in a grove of maples near by, and together they made quite a noise. Each time before she has slipped off the nest as quietly as possible.

On going up I found one egg hatched and another with a hole in it three-quarters of an inch in diameter. The bird's bill was moving about weakly but he didn't seem to be making any effort to get out; getting his wind, perhaps. There were only a few small pieces of the shell in the nest, so I think the old bird threw them over as soon as the chick hatched. Of the other two eggs, one was still whole and the other was cracked a little where the bird was pushing out from the inside.

The chick that had hatched was quite pretty, being covered thickly with light grey down, which was nearly three-fourth inches long on the head. The belly was entirely bare. The little fellow peeped quite lustily

as soon as he heard me coming up, or perhaps he was cold. His eyes were open and of a greyish color. There is a stuffed Hawk about three days' old at the Peabody museum in New Haven. It looks just as this one did.

On the 13th, when I went next, all the eggs had hatched and the shells were all taken away. There was a surprising difference in the size of the chicks, the first out being three times the size of his youngest brother. The smallest looked as if he was just out of the egg.

May 20th he had disappeared. The poor little chap was probably starved out. See Darwin on the "survival of the fittest." There is not as much difference between the other three as before. They have grown fat on the food that the little one would have had.

I gave them two young English Sparrows, hoping that they would acquire a taste for those dirty little immigrants, but they were not hungry. There was a half-eaten frog in the nest, also some *fresh* maple leaves. I don't see why the bird brought them there. They could not have come themselves, as they were attached to a twig about six inches long, and besides there are no maple trees in the immediate vicinity, only black oaks. Perhaps the chicks used them as fans to keep the flies off!

The oldest chick found his voice to-day. He balanced himself on his tail—his legs are still much too weak to hold him—and squawked at me quite bravely. Rather feebly to be sure, but my brother in the boat thought it was the old one at a distance.

On the 27th the primaries had begun to show. The largest Hawk got up on his legs, but would have tipped over backward out of the nest if I hadn't put my hand there. The others simply sat up straight and opened their mouths—toosurprised to speak. There was a green willow stick in the nest over three feet long, with the leaves all on it.

Can any one tell me what they do with these green things?

June 5th the wing feathers were four inches long, and the tail an inch and a half. There were many large feathers on the back, less on the breast and only a few on the head. The shoulders have a decidedly reddish tinge.

We have a regular programme now, which the birds follow whenever I go up. As soon as I come in right above the edge of the nest, which is practically a sphere of sticks about two feet in diameter, merely flattened on top and softened with leaves, up jumps the largest with wide open mouth, and begins to back off. When I think he will surely fall over the edge of the nest, he stops and stands there swaying about in a very reckless manner. He reminds me of a chicken which has had too much bread and whiskey. He seems to impress it upon his brothers "that something's up" — which is me. They sit up and open their mouths and stick their legs straight out in front and stare with an expression that is a combination of surprise and fear which would make a fortune for any taxidermist who could reproduce it. Here's an idea for some of our rising young naturalists: a nest full of young Hawks staring in surprise at a stuffed monkey appearing above the edge.

When I climb down they tune up and keep on squawking until I get nearly to the bottom. If I touch them or make any sudden movements they begin sooner.

June 12th the plumage had increased a good deal, but they still have a thick coat of fuzz underneath. The legs are covered down to the knee joint. The under parts are white, spotted with brown, and the back a darker color.

They were all standing up when I got in sight of the nest, and as I went up very quietly they didn't seem much frightened. I made one perch on my hand by pushing against his toes. He didn't seem to mind it much, nor did he yell at all until I started

down. There was some green grass and lots of maple leaves in the nest.

They had flown when I next visited the place on June 17th, and I think from the looks of things that they left some time before the 15th. On climbing the tree I found one of them lying on his back dead. Had all of them been killed instead of flying off safely? The dead one smelled pretty rank, but I don't think he had been dead more than three or four days. Many of his bones seemed to have been broken, but perhaps, being young and tender, they had softened.

Possibly he had had a scrap with his brothers, but I think if they had been so rude as to kill him, they would have finished the business by eating him up! None of his parts were missing, though. Then, too, if it had been much of a fight he would have fallen over the edge. He might have starved to death, but I don't believe he would have gone off so quickly, as he seemed as well as the others on the 12th. On the whole, I don't see what killed him.

From watching this nest of Hen Hawks, I found that it takes over two weeks, and probably three, for Red-shouldered Hawks' eggs to hatch, and about forty days or something less than six weeks before the young leave the nest; that they eat frogs and snakes, which was well known before, and that the parent does not break the egg to let out the young one—about which, I believe, there has been some discussion. I never saw any feathers in the nest or any indications that they had been eating birds. Further: the primaries come out first, in their third week, and the tail feathers a little later, while the body feathers do not open out until about the fifth. They are not able to stand up at first—this family did in their fourth week—but they can prop themselves upon their tails and hawl after the first week.

How much of this would I have found out if I had taken the eggs? I think that four or five sets at most, to show the varia-

tion in color, is enough for anybody's collection. If it is necessary to know the average number of eggs laid by a bird, why can't it be found just as easily by leaving the eggs and taking notes instead? I think such lists as the Jackson collection, in the February number, are interesting and useful, but I would be more interested and more instructed by some good notes on the breeding habits or nests, rather than the mere eggs. The egg is simply a product of nature which the bird has nothing to do with, but the shape and location of the nest depend wholly on her ingenuity. Therefore I think a collection of, or notes upon, nests is more interesting than anything which has to do wholly with eggs.

But what I want to know is, what killed that young Hawk, and why did the old one bring so many green leaves to the nest?

Henry R. Buck.

Notes from Greenland.

During a short sojourn in Copenhagen in January of this year, I visited the Zoological Museum of the town, as during my previous stay in Greenland I had become interested in the ornithology of that icy land. I examined especially the Greenland bird skins, under the guidance of the inspector of the museum, Mr. H. Winge. As Greenland belongs to the North American territory, I think your readers will be interested to learn of the most remarkable observations that I made.

A recent acquisition of the museum was a collection of bird skins taken on the shores of Eastern Greenland, north of 65 deg. N. lat., by the Danish expedition, which had just returned after having explored that hitherto unknown part. The most remarkable were 2 skins of *Anser segetum*, Bean Goose, both taken in June, 1891. (As I remember, June 5 and June 17). This makes it very probable that it breeds in those tracts. To my knowledge these are the first specimens

taken in Greenland or America. It is a very common bird in Iceland, and it is a wonder that it has not been taken before in Greenland. I also saw a downy young Barnacle Goose, only a few days old. Three young ones had been taken. The exact place of capture of this and the Bean Goose I do not remember. I can only say that it was on the shore of Eastern Greenland, between 65 and 70 deg. N. lat.

The naturalist of the expedition, Mr. Bay, intended to publish the results of the voyage in "Meddelelser fra Groenland," but at what time it will be published I do not know. Mr. Winge showed me a skin from Greenland of the European *Hirundo Rustica*, which I did not embody in my little book, "Birds of Greenland."

This is, so far as I know, the first sure American taken specimen of this specie.

I also saw five *Somateria* skins from Godthaab, in South Greenland, taken by Mr. Krabbe. I myself do not know *Somateria* *V nigra* and Mr. Winge considers this form a variety only of *S. Mollissima*: but he said that these skins (or at least those of the five which had the most distinct V shaped mark) were perfectly alike and inseparable from the Pacific Eider. The marks on Nos. 1 and 2 were very distinct as in *S. Spectabilis*. On No. 5, the mark was not continuous, but only consisted of a few black feathers, which nevertheless distinctly enough defined the V. Nos. 3 and 4 were transitions between Nos. 2 and 5. This might strengthen Mr. Winge's opinion, but that you Americans will of course accept it that they should be hybrids between *S. Mollissima* and *S. Spectabilis* is quite out of the question. Sooner might No. 5 (and perhaps Nos. 3 and 4) be a hybrid between *S. Mollissima* and *S. V nigra*.

I may add that Mr. Winge is our chief authority in ornithology.

A. T. Hagerup.

Kolding, Denmark, April 10, 1893.

[Received April 27, 1893—Editor.]

Music on the Wing.

Shelley, in his "Ode to a Skylark," gave to that bird, for his aerial song, a celebrity, which has never been awarded to some of our less classic birds.

It is true that the English Skylark excels all American song birds, in the altitude he attains and in the strength and continuation of his song; yet which of our readers can tell those of his native birds that sometimes, "like an embodied joy whose race is just began," leave earth and, soaring upward, send forth melody, which in point of sweetness may well vie with that of any bird.

In writing this article, I desire to call the attention of the readers of the "O. & O." to a beautiful observation which, as far as I know, has received little notice—the singing in the air of some of our common birds. Whether this act comes under the head of instinct, or an inward exultation of which we have no knowledge, I am unable to say; though it appears to me that the term "instinct" is too general, and when I see a Blue Grosbeak spring up from the earth and, flying aloft in the clear blue sky, pour out a song which is usually sung from the top of some low shrub, then, to me, it seems unreasonable that the word instinct should be applicable to this interesting performance.

Every bird seems to seek a more or less elevated situation while singing, though it is curious that some will sing while flying, and that others, even though of the same family, never vocalize on the wing. Bearing that in mind, we know not what bird, in a moment of happy feeling, may become transformed into a veritable Skylark, and give us a sweet surprise as the following, the first of these phenomena I had seen. While out in a field, I heard, far above my head, the familiar notes of our little Indigo Bunting. Looking up I discovered him, a mere speck, sailing and singing away at that height as though in raptures.

I had never seen this before, and was

much struck with it, for it certainly was pleasing and a subject worthy of study, alone in the questions — what birds sing on the wing? and what prompts it? besides the many other speculations which it will present to a lover of nature. Since I have several times seen this aerial flight of *P. cyanea*, accompanied with song. The Indigo Bunting always selects the top of some tree near his nest as his special singing site; and there his charming notes may be heard at almost any time of day. Strange, though seldom, is that inspiration which carries this modest little creature to sing high up in the air, as though the earth were no longer worthy of its presence.

Having observed this in the Indigo Finch, I was led to look for similar characteristics in other birds. I found that the Blue Grosbeak, Mocking-bird, and some of the Vireos all give us "music in the air." The Mocking-bird has a queer way while singing of flying straight up for about twenty feet in the air, then dropping down on the same branch in a flood of song.

With the exception of the Mocking-bird, none of our true Thrushes sing while flying, though all of them give cries of distress and anger in the air.

Who has not scanned the space overhead and strained their eyes to discern the origin of those simple quavering notes *chicker-chick-chee*, *chicker-chick-chee*, and whose sense of grace and beauty is not gratified at the sight of the American Goldfinch, or Yellowbird, as he sees him ploughing through the air, now up, now down, like some fairy bark riding the waves, each rise and fall in perfect time to his cadences? These notes of the Goldfinch are not the same as that "luxurious nuptial song" which he warbles so joyously in the spring; and, till the other day, I had never seen this pretty bird flying and singing in a manner so happy that it threw me into ecstasies.

I was in an old orchard — that interesting wreck so often the scene of ornithological

marvels — at about eleven o'clock. The day clear and bright had inspired the birds all around to song; when suddenly from somewhere, I knew not where, a Goldfinch came, and with such exquisite grace of flight he soared round and round, that I remained gazing up at him in amazement, rooted to the ground until he disappeared in a tree, ceased singing, and thus broke the spell.

Of course all the readers of the "O. & O." have seen that amusing feat of the Yellow-breasted Chat, as he flutters in the air with out-stretched legs and jerks out a jumble of curious noises, both with wings and throat; all have been pleased with the gentle warble of the Bluebird, flying to his mate; and have heard the love call of the Cuckoo as he wings his silent way. These alone are full of interest when we consider how few birds sing at all in the air; but to those lovers of nature who have never seen some of our common birds mount on their wings, unaccustomed to sustain a high flight, as though caused by some sudden inward exuberance of feeling, and sing in a way which will certainly give pleasure to all that witness it, to those who desire to reap "the harvest of a quiet eye," is this written with the hope that they may find in this study half the enjoyment that I have found. *Henry Aylett.*

Aylett, Va.

Something About Owls.

It is commonly believed that the Owl is one of the most destructive birds frequenting the woods of North America. That it is voracious, is well known; and it is generally believed to be injurious to both the farmer and the sportsman; to the former because it destroys his chickens, and to the latter because it preys on various kinds of game. It is also believed to feed largely upon song birds. Actuated by these impressions, it has always been customary to destroy these birds whenever and wherever possible. Indeed, the war that has been waged against them has been so active and long-continued in

this locality that the birds, though formerly numerous, are now nearly extinct; and in every part of the United States they are being rapidly exterminated.

Not long ago the Agricultural Department at Washington, for the purpose of learning what proportion of the carnivorous birds were really injurious and what beneficial, sent a large number of circulars to various parts of the country, and even as far as Alaska, asking people to send the stomachs of all carnivorous birds to Washington for examination. A large number of persons responded, and two thousand seven hundred stomachs were received by the department. Of these eight hundred and fifty were the stomachs of various kinds of Owls: sixteen species being represented.

These were all opened, and the contents carefully examined by expert naturalists, and the report of the examination has lately been issued, in a neat volume of two hundred pages.

From this report we glean the following facts:—

Of the Barn Owl, which is found more or less abundantly over the entire country, thirty-nine stomachs were received. Seven of them were empty, four contained insects, one a Pigeon, three other small birds, and the balance contained small Rodents, such as Mice, Rats, Gophers, etc.

Of the Long-eared Owl, found from Mexico to Hudson Bay and from Nova Scotia to California, one hundred and seven stomachs were examined. Of these, but one contained a game-bird (a Quail). Fifteen contained other birds, one a Squirrel, and the remainder contained Mice.

Of the Short-eared Owl, distributed over the entire country, one hundred and one stomachs were examined. Eleven contained small birds, one contained part of a Rabbit and seventy-seven contained Mice.

Of the Barred Owl, inhabiting the entire country east of the Rocky Mountains, one hundred and nine stomachs were examined,

Five contained poultry or game-birds, thirteen contained other birds, five contained Squirrels, four contained Rabbits, and the others contained Mice, Frogs, Lizards, etc.

Of the Great Grey Owl, which is very rare south of the fortieth parallel, nine stomachs were examined. All of them contained small Rodents, and one in addition contained a Snow Bunting.

Of the Saw-Whet Owl, also rare below the fortieth parallel, twenty-two stomachs were examined. Seventeen contained Mice, one a Sparrow, one insects, and three were empty.

Of the Screech Owl, common throughout the entire temperate zone, and the best known of all the Owls, two hundred and fifty-five stomachs were examined. One contained a Pigeon, thirty-eight contained other birds, ninety-one contained Mice, and one hundred contained insects.

Of the Great Horned Owl, found from Central America to the Arctic circle, and which seems to be the black sheep among Owls, one hundred and twenty-seven stomachs were examined. Of these, thirty-one contained poultry or game-birds, eight contained other birds, twenty-nine contained Rabbits, five contained Squirrels, and but thirteen contained Mice.

Of the Snowy Owl, which is rare south of the fortieth parallel and west of the Rocky Mountains, thirty-eight stomachs were examined. Two contained game-birds, nine contained other birds, two contained Rabbits, and twelve contained Mice.

Of the Hawk Owl, which, by the way, is seldom found as far south as the United States, but one stomach was received. That came from Quebec, and contained a Mouse.

Of the Burrowing Owl, which belongs exclusively to America and is found from Patagonia to Manitoba, thirty-two stomachs were examined. Three contained small mammals and the remainder contained insects.

Of Pygmy Owl, rare east of the Rocky Mountains, but six stomachs were examined,

None were found to contain either poultry or game.

Of the Elf Owl, the smallest known species, three stomachs were received. All of these contained insects.

These figures, while they may not be able to do away with ignorant prejudice, show that the Owls, with the possible exception of the Great Horned Owl, instead of being ruthlessly slaughtered, should be protected.

C. O. Ormsbee.

Montpelier, Vt.

The White-faced Glossy Ibis.

This beautiful and interesting species is but a rare summer visitant on the southern coast of British Columbia. Mr. Fannin, in his check list of the birds of this Province, records the taking of but two specimens within its boundaries; one at Salt Spring Island off the coast, and another at the mouth of the Frazer river. Its native haunts and home are chiefly in the southern regions of Texas, and westward into Arizona and also southward through Mexico to tropical America. In some parts of Texas it has been found congregating in great numbers northwards. On the east of the Rocky Mountains, it has been found in southwestern Kansas, but its occurrence there, or in the intermediate regions, north of New Mexico, is rare. In southern California it is only occasionally seen. At Santa Barbara, Mr. Streater records it as "Migrant, not very common. I have only noticed the bird in spring." Mr. Bryant, in his "Birds of Farallon Islands," says, "One bird was shot in the spring of 1884, from a flock of half a dozen." In size and general plumage, this species differs but little from the Glossy Ibis; the chief distinctive features is its white face. In length this species is about twenty-four inches, and each wing from ten to twelve; the tail is four inches, and the bill four and a half, the tarsus being three inches, and the middle toe and claw also three inches. The claws are slender and nearly straight, the head is bare only

about the eyes and between the forks of the jaws, the bill is of dark hue. The color of the general plumage is of a rich chestnut hue, changing to glossy dark green, with purple reflections on the back of the head, wings and other parts. The plumage of the young is greyish-brown, with white streaks on the head. This bird nests in communities, not only with its own species, but also in the society of Egrets, Herons and other waders that nest in similar positions. The places selected for nesting purposes are extensive, reedy and tule marshes and on the tops of broken down, and among growing reeds and water-grasses the nest is placed. It is rather well and compactly built, and quite distinguishable from the more clumsy platform-like structures of the Herons. It is composed of dry stocks of reeds, tules, and other vegetable materials that it finds in the vicinity. The standing reeds being interwoven into the nest, helps to keep it out of the water. The set of eggs is generally three in number, and average about 1.50 x 1.30 of an inch. The time for nesting is April and May.

From MS. "Avi-fauna of British Columbia."

William L. Kells.

Listowel, Ont.

Here are some of my best clutches for the year: May 15, Meadow Lark, 6. May 24, Brown Thrasher, 3; Olive-backed Thrush, 4, 4; Wilson's Thrush, 4; Yellow Warbler, 5. May 25, American Woodcock, 4. May 27, Wilson's Thrush, 3. May 31, Wood Thrush, 4. June 5, Scarlet Tanager, 4. June 8, Wilson's Thrush, 4. June 10, Black Tern, 8; Horned Grebe, 8; Least Bittern, 2; Florida Gallinule, 36 eggs; Marsh Wren, 68. June 12, Black Tern, 76 eggs; Coot, 35; Gallinule, 53; Pied Bill Grebe, 20; Horned Grebe, 20; Marsh Wren, 4. June 30, Wood Phoebe, 1 egg and 2 young. July 5, Yellow Warbler, 3. July, 31, Goldfinch, 4. June 5, Red-shouldered Hawk, 3 young; Crow, 5 young.

S. H. B.

St. Clair, Mich.

The Marsh Hawk.

The Marsh Hawk or Harrier (*Circus hudsonius*) is one of our commonest Hawks. It generally arrives in this locality about the middle of March, and from that time till the last of November can be seen sailing over the prairies and fields in search of its prey. Unlike most Hawks, it can be readily recognized at a distance by means of the white tail coverts. I shot my first specimen of this species on April 9, 1892. It was hovering around over a spot on the prairie, and finally lit on the ground, and I shot it. On going to retrieve the game I found it had in its talons a large field mouse, variety (*Arvicola riparius*); the mouse was still alive, but badly lacerated. The bird was a fine male, of a bluish-gray color above and white below, sparsely streaked with light reddish-brown. It measured L. 19; W. 14; T. 9. The iris was a pale straw color. The male of this species is about as beautiful a Hawk as can be found. On June 4, 1892, while wading through a small slough, I saw a Hawk fly from a clump of grass and fly off over a hill. I went over to the nest, which was in the middle of the clump of grass and floating in water about two feet deep. It was about sixteen inches across, rose about three inches above the water and was nice and dry inside, neatly hollowed, and composed of small sticks, rushes, reeds, small rose bush, slough grass, and lined with fine dry grass. I left the nest to see what the Hawk would do. She circled around quite a ways off, seemingly unconcerned, and then came back to the nest. I then returned, and gathered in the five eggs, which were a dirty white color, unmarked, with incubation advanced.

My next find of this species was May 13, 1893. While I was hunting, a Hawk flew up from the ground in front of me. On investigation I found a nest containing three beautiful fresh eggs. They were so different from the Marsh Hawk's eggs I had found before, that at first I thought they were of

another species. The nest was on the ground, about half way up on the north side of a high, steep hill, composed of large weed stalks, mostly placed on the lower side of the nest to make up for the slant of the hill. It was lined with fine dry grass. The ♀ bird was soon joined by the ♂, and flew screaming around very high up in the air. I came back to the nest about two hours afterward to try and secure the ♀ bird. She left the nest as before, and as she made a low swoop my companion shot her. Took the eggs, which were of a pale bluish color, two of them rather thickly blotched over the whole surface with a very light brown with a lilac tinge, looking like miniature eggs of the Red-tailed Hawk; while the third egg was thickly spotted with many small and a few large spots, all of a clear brown color. The ♀ Hawk measured 21 inches in length, W. 15½; T. 1¾. She was considerably larger and more courageous, though not as beautiful as the male bird. The back was brown, without any bluish tinge, and with the streaks underneath larger and darker. The iris of this bird was brown.

This occasion was the only time I ever heard a bird of this species utter a sound.

Rudolph M. Anderson.

Forest City, Iowa.

A Day's Shooting.

One day in October a friend named George G. Dyer and myself started out to get some sea birds to mount. We went down to the dock and, hoisting the sail of my small boat, we started off. We first went to the upper part of the lake to see if there were any Ducks feeding. While sailing along I saw a bunch of Coots or White-wing Scoters come in from sea and light. Pointing the boat's head in their direction, I told my friend to put some heavy shot in his gun and I did the same. I sailed the boat within 50 yards of them before they rose. I heard the report of my friend's gun, but did not see what he killed. As an old cock came my side of the boat my

first barrel was a clean miss, but I had the satisfaction to see him double up at my second. George had missed his Duck with the first barrel, but wing-broke another with his second. We did not stop to chase the wounded Duck but picked up the one I killed and started down the lake. On the way an old Cormorant came over us; we both fired at the same time and down it came completely riddled. As we sailed near a small island my friend said, "What kind of a bird is that sitting on the water near the shore?" I soon saw that it was a Red-throated Loon. It was badly wounded, and George easily killed it. I saw a number of Gulls feeding on some kind of a dead animal the other side of the island; so beaching the boat we started after them. We separated and crawled toward the birds. When I was within 40 yards I raised my gun to fire, but at that moment two puffs of smoke arose from the grass not 50 yards from me and I saw a number of birds fall; but as the others rose I shot one for each barrel. When we counted the Gulls, we found that there were 1 Herring Gull, 4 Kittiwakes and 2 Common Terns.

As we had all the birds we could use, we started back to the boat and kept on our way down the lake. After sailing about a mile we saw a flock of Ducks off to the right of us. I turned the boat's head toward them, but they arose and came within about seventy yards of us. George had a charge of BB shot in his gun, so he blazed away and had the pleasure of seeing one of them fall. Picking it up we found it was a Velvet Scoter. As it was then about 3 o'clock, I turned the boat about and we started for home. On the way I shot an Osprey that came sailing over. It was dark when we reached home with our birds. Just before we arrived at the house an Owl flew past. We could not get a shot at it. Reaching home I began work on the birds we had killed.

Claude G. Dunn.

Ocean View, R.I.

A Day's Ramble.

Sunday, May 24, 1893, was a beautiful day, warm and pleasant, just the one for a ramble in the woods. Starting at 10 o'clock, I went north to the city limits, taking a car there and riding to Gross Park, a little village about two miles out. I arrived there at 11 o'clock and went to the Chicago river, which flows through that district. What a river! On one side a vast prairie and on the other thick woods—a muddy, sluggish stream with no current. Following the river to the north, the woods are thick and dark, while now and then I passed a clearing and saw tree trunks that had been blasted by lightning, where they had fallen years ago. "What an untold joy it is to find oneself on a fine day in the woods with nature." The ground was covered with all kinds of wild flowers, while wild grape vines covered many of the old oak trees. Ivy and other vines were there. Wild rose bushes were plentiful and wild violets were all over, while large dandelions looked like sheets of gold. The cherry and apple trees were abundant. Moss of all shades, from light to dark green, cover rocks and trees. Sitting down on a large rock in the shade, within a stone's throw of the river, I watched the birds fly by and listened to their songs. The hammering of the Woodpecker near by in a tall tree, seeking a soft spot in the wood to make a home, was interesting. The harsh cry of the Jay was heard now and then, while a Crow was seen flying to the north. Silence for awhile, then broken by the song of the Thrush and Robin, while Blue Birds, Vireos and Catbirds flitted from tree to tree. Large Toads hopped about; while Frogs were plentiful. They were quiet. Now a Grass Snake glided by me, perhaps in search of food, so I let him go peacefully. I started for home, as it was getting late and arrived in time for supper, wishing that I could spend days like this in woods.

Philip D.

Chicago, Ill.

THE
ORNITHOLOGIST AND OÖLOGIST
 A MONTHLY MAGAZINE OF
NATURAL HISTORY,
 ESPECIALLY DEVOTED TO THE STUDY OF
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 THEIR NESTS AND EGGS,
 AND TO THE
INTERESTS OF NATURALISTS.

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The next thing in order will be the Nov.
 and Dec. "O. & O."

GORDON PLUMMER.

Gordon Plummer died of pneumonia at his home in Brookline, Mass., on November 25. He was well known by the sportsmen and the older naturalists in this State.

Mr. Plummer was early in the field, sending a collector to California in 1882. At the time of his death he possessed a collection of skins that are remarkable for their perfection of plumage and make up. He also possessed a collection of mounted birds, the work of nearly all the leading taxidermists of Massachusetts and New York city. It was his rule, whenever he saw a specimen that was superior to his, to procure it and discard the inferior one. The result was that his collection is the finest private one that we ever saw, not large in numbers, but gilt edge. During the past year he devoted his leisure time to making a collection of eggs and was displaying the same care in selection. A Labrador Duck from his collection was purchased in 1892 by Rothchilds. In the November, 1892 "O. & O." "Muskeget Island" fully represented his feelings as a

sportsman. Mr. Plummer was engaged in the leather business in Boston. For eight years he has been a constant caller at our office. During his last call he said, "One of the greatest pleasures I have is the time I devote to my collections."

Being of a kind, bright and genial disposition, he had many friends who will mourn his departure.

Brief Notes, Correspondence and Clippings.

We are in want of the following skins for a special purpose. If any of our readers have them among their duplicates for exchange we would be pleased to hear from them: A.O.U. Nos. 315, 293, 353, 371, 372, 373e, 373d, 374, 378a, 379, 379a, 381, 382, 392, 417, 650, 658.

Archie Van Leer writes that he thinks the Play House of the Satin Bower Bird in the Smithsonian display at Chicago was one of the best things that he saw. He also says that Kansas made the best display of taxidermy.

Winter birds have been scarce thus far.

We have just had a Coati Mondí placed in our hands for sale. It is tame and is quite a pet.

Any of our readers who have Albinos that they wish to dispose of will please send particulars at once.

Wanted, a set each of the eggs of Corn Crake and Ruff.

A subscriber asks if we can furnish a pet Coon? Who has one? Another one wants a stuffed Whale, to use out west to exhibit next summer.

Wanted, A 1 skins, Hoelboels Grebe, Short-billed Gull, Am. Golden Plover; all males in full plumage. Also two females Black-throated Blue Warbler.

Any one wishing to hire a first-class taxidermist will do well to communicate with us.

You can help us very much by renewing your subscriptions for 1894.

The "Nidiologist," in its last issue, publishes a Connecticut dealer as attempting to palm off hand colored eggs on the unsuspecting. If such is the fact it is well to have it ventilated.

We have received a number of interesting articles from our readers since our July issue. Continue to send them in; the more we have on hand the better variety we are able to give in each issue.

The article "Notes from Greenland" by Mr. A. T. Hagerup is of unusual interest. We know that our readers will unite with us in extending an invitation to send us other communications.

Harry R. Wilder, of Riverside, Cal., called on us recently. He is one of our eastern collectors who has gone west to locate. He is interested in the honey business, but keeps his eye on the birds at the same time.

A CORRECTION.

In Vol. 14, page 57, 1889, of this Magazine I reported the capture of a Little Horned Owl from Yellow Medicine County, this State, which was really only *Asio accipitrinus*. In the same report I mentioned a Great Gray Owl, which is only a ♀ *Nyctea nyctea*.

Albert Lano.

NOTES FROM BOONE, IOWA.

August 27 I collected a set of fourteen Quail eggs, bird on nest. One week later a boy found a nest with thirteen eggs. These are the latest records of the nesting of the Bob White that I have for Boone County.

September 17 a fine Albino Red-winged Blackbird was brought to me by Frank Brown, who shot it that day at Clear Lake,

north of the city. It is a perfect Albino, pure white with the exception of the lesser wing coverts, which are a delicate pink; eyes pink. This handsome fellow was with a flock of about two hundred Blackbirds, all of normal color. It measured: Length, 8.10; extent, 12.00; wing 4.00; tail, 3.01; bill, 0.60.

The Smithsonian display at Chicago was alone worth the expense of the trip.

Carl Fritz-Henning.

A QUICK FLIGHT.

The Pigeon flying season of 1892 in Philadelphia, Pa., was opened with the journey of three birds — Forty Minutes, Victor and Bowdoin, belonging to Daniel Connelly, Boston, from New York city, and the lead for the Columbian prizes has been taken by the best speed as yet to the credit of the Boston birds, and by a greater distance than has been made at so early a date since 1884.

The start was from the tower of Madison Square Garden by Mr. J. V. Gottschalk at 9.15 o'clock. The report rendered by wire gave the cipher of the countermark placed on the bird in New York before the start and 12.15 P.M. as the time of arrival.

The air line distance covered is about 174.6 miles. This, at the figures reported, would give an average speed of 1707 yards per minute, and the mile in 61.8 seconds.

The countermark having been reported the day of the start gives the proof of the distance being covered in the day, and the bird therefore has the lead for both the Columbian prize and for the Clipper trophy for the best form over 1000 miles; the Outing prize, for the greatest number of miles as yet covered; the George W. Childs and the S. M. P. A. trophies, for the greatest distance in the day, and with the possibility of making a claim for the special prize offered for the best break in the record for speed from the metropolis to New England.

Editor "O & O": I will open the year of

1893 Wednesday by starting on a snow-shoe trip of 100 miles after Owls' eggs, followed by one, as soon as migration begins, to the famous Devil Lake County.

Last year I collected 640 eggs, 71 varieties; this year will swell the list a little, consequently the snow-shoe trip.

Hope to add a Bald Eagle to my *Raptors* as I have heard of one out 70 miles in a little patch of timber on the prairies. Prairies! A multitude of thoughts that one word contains; dreary in winter, inviting in spring, beautiful in summer and glorious in autumn. What medicine for the sick and hard-worked clerk or business man of the cities would be a few weeks of life here.

A good team of horses and dogs, guns and a place to sleep, then let business take care of itself.

Few can realize how much benefit such a trip is unless it has been their lot to receive such benefit.

To be born in New York State and raised in North Dakota is not the luck of many men. For 14 years this has been my home. Saw the Elk in plenty when too small to hunt, Deer and Antelope. It is a fine place for the hunter or naturalist.

Will give another note in the spring, after the season is passed, telling how successful it was. *Alf. Eastgate.*

Grand Forks, N.D.

"What is authentically known of the rapidity of flight by different species of birds, and which is considered the swiftest?"

To Mr. Smith's question, I believe it may be answered that the Falcons are the swiftest, and as far as my experience goes it seems to me that the Duck Hawk is swifter than any other species.

It easily overtakes any bird within the range of its vision, and does so with incredible velocity.

A Bobwhite, once fired at by me, was overtaken by a Duck Hawk in the distance of two hundred yards, though the Hawk ap-

parently had to fly three times as far as its quarry before it reached the latter.

On another occasion two Duck Hawks were seen pursuing a flock of tame Pigeons. These were far above their pursuers, and while in that position were safe. But the Falcons began to "ring," or ascend in circles till the smaller bird, the male, got his "pitch" first, then, with astonishing swiftness, he overtook the Pigeons, whose rapidity of flight is very great. When the Falcon began his swoop, at about an angle of twenty degrees with the flight of the Pigeons, these, though going very fast, seemed in comparison with the progress of their pursuer scarcely to move, as he shot like an arrow through the flock. Other instances of the swiftness of flight by Falcons might be given but these seem to show that no bird flies as fast as the Falcon. *Wm. C. Avery.*

Greensboro, Ala.

NESTING OF HUDSONIAN CHICKADEE IN MAINE.

On July 10, 1893, while I was walking in the spruce forests in Cutler, Washington County, Maine, a small bird suddenly flew from the lower branches of a small spruce tree near an opening in the woods.

I thought she had just left her nest, and upon investigating found it in a natural cavity in the stub of a small hard-wood tree which had been destroyed by fire some years before.

I waited some time for the bird to return to identify it. In the course of fifteen minutes she returned, and flew into the hole which contained the nest.

When she came out, in about a minute, I shot her and found she was a Hudsonian Chickadee.

The entrance to the cavity was about 16 inches from the ground, and the cavity itself was about eight inches deep.

The nest was compact and large, made of rabbit's hair and moss. It contained six young birds, a few days old.

Gardner W. Hall.

ESTABLISHED 1875.

ORNITHOLOGIST

—AND—

OÖLOGIST.

VOL. XVIII.

No. 1.



JANUARY,

1893.

CONTENTS.

The First Spring Outing	John N. Clark	1
A List of the Birds of Randolph County, Ind., with some notes on the Mammals of the same county	Ulysses O. Cox	2
Domestication of the Canada Goose	James B. Purdy	4
Nesting of the Cerulean Warbler	Philo W. Smith, Jr.	5
A Few Days Among the Blue-winged Warblers	Isaac S. Reiff	6
A Comparison of the Nesting Habits of the Long- billed and Short-billed Marsh Wren	C. W. Bowles	8
Winter Notes from Stephentown, New York	Benjamin Hoag	11
Early Nesting of the California Thrasher	H. M. H.	12
Distribution of Illinois Birds	Dr. A. C. Murchison	13
Abnormal Coloring of a Song Sparrow's Eggs	G. L. H.	13
Brief Notes, Correspondence and Clippings		15
Nesting of the Carolina Wren	M. L. C. Wilde.	15

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No. 2.



FEBRUARY,

1893.

CONTENTS.

Distribution of the Long-Eared Owl and Cooper's		
Hawk in Illinois	W. E. Loucks	17
Lewis Lindsey Dyche	Chicago "Inter-Ocean"	22
In the Great Dismal Swamp	T. Gilbert Pearson	26
The Acadian Owl in Philadelphia County, Pa.	M. L. C. Wilde	28
Are Spotted Eggs of Native Goldfinches Common?	Harvey M. Hall	28
Eggs of Warblers in Collection of Thomas H. Jackson		29
Brief Notes, Correspondence, and Clippings		30
Winter Residents of Milton, Wisconsin	Floyd Coon	31
A World's Fair Suggestion	Albert Lane	31

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VOL. XVIII.

No. 3.



MARCH,

1893.

CONTENTS.

Distribution of the Cooper's Hawk in Illinois	A. C. Murchison	33
Some Holiday Trips	Arthur H. Howell	35
Nesting of the Duck Hawk on Mt. Sugar Loaf, Mass.	I. C. Greene	37
The Pine Grosbeak in Michigan	Scolopax	39
Notes from Cobb's Island and Vicinity	William H. Fisher	41
Green Eggs of the Red-tailed Hawk	Benjamin Hoag	42
The Slender-billed Shearwater	William L. Kells	43
Our Talented Blue Jay	A. W. Morse	44
Notes from Belchertown, Mass.	J. W. Jackson	45
Mocking Bird in Massachusetts in Winter	H. E. Barton	45
What Killed the Swallows?	Erle Morton	45
Brief Notes, Correspondence, and Clippings		47

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VOL. XVIII.

No. 5.



MAY,

1893.

CONTENTS.

Alexander Wilson	Jos. M. Wade	65
Distribution of the Mocking-bird in Illinois	A. C. Marchison	67
My First Day of Egg Collecting	A. C. Townsend	70
Nesting of the Brown Pelican	G. Sirrom	74
Nest of the Sharp-shinned Hawk	William L. Kells	76
Late Nesting of the Bob-white	G. Sirrom	77
A Home Among the Birds	R. S. Ingersoll	77
Brief Notes, Correspondence and Clippings		78
American Woodcock	B. H. Swales	79
Breeding Habits of the Ruby-throat at Ballston, New York	R. S. Ingersoll	79

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VOL. XVIII.

No. 6.



JUNE,

1893.

CONTENTS.

Some Prairie Birds	J. W. Preston	81
Distribution of the Black-Crowned Night Heron in Illinois	A. C. Murchison	82
My Outfit	Arthur M. Farmer	85
An Old-Time Onting	W. S. Strode, M.D.	86
Nesting of Gambel's Quail in the Colorado Desert	Fred. W. Koch	90
Malformation in Birds	Morris Gibbs, M.D.	91
A Few Facts about the Turkey Buzzard	R. H. White, Jr.	92
Nesting Habits of the Great Horned Owl	James B. Purdy	92
Notes on Arkansas Flycatcher in Towner County, North Dakota	Elmer F. Judd	93
Finds	Carl Fritz-Henning	94
Poor Datas	Charles S. Butters	95
Large Eggs of the Field Sparrow	G. S. H.	95

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OÖLOGIST.

VOL. XVIII.

No. 7.



JULY,

1893.

CONTENTS.

Canadian Eagle	Albert M. Roberts	97
Spring Notes from Philadelphia	Herbert W. Congdon	98
A Taxidermist's Gun	Loye Miller	99
Notes from Iowa	G. H. Berry	99
Nesting of the Hooded Warbler	Almon E. Kibbe	99
Detroit, Mich., 1891 Notes	B. H. Swales	100
Old Orchard, St. Louis Co., Mo.	O. Widmann	101
A Utah Eggng Trip	H. C. Johnson	101
Nesting Habits of the Great-horned Owls	C. J. Y.	103
Nesting of the Broad-winged Hawk	Benjamin Hoag	103
A Peculiar Nesting Site of <i>Coccyzus erythrophthalmus</i>	C. L. Brownell	104
Notes from Riverside, Cal.	Loye Miller	104
Sketch It	Arthur M. Farmer	105
Who will Answer?	Jas. B. B. Smith	106
Birds of Michigan—A Review	L.	106
Brief Notes, Correspondence and Clippings		107

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AUG., SEPT.,

OCT., 1893.

CONTENTS.

AUGUST:

Distribution of the Yellow-headed Blackbird in Illinois	W. E. Loucks.	109
Nesting of the Saw-whet Owl.	Fred B. Spaulding.	112
Bird Notes from Western North Carolina.	Minot Davis.	113
Austin F. Park	Troy, N.Y., Times.	114
A Peculiarity in the Nesting Habits of the Virginia Rail	J. H. Bowles.	115
August Nests and Birds	P. M. Silloway.	116
The Downy Woodpecker an Enemy of the Codling Moth	Benjamin Hoag.	117
Brief Notes, Correspondence and Clippings	James B. Purdy.	119
The Wood Thrush	James B. Purdy.	119
Falcon Harbor, Bowdoin Bay, North Greenland, Aug. 13 1893	George H. Clark.	120

SEPTEMBER:

Two Days Eggling in June	Carl Fritz-Hemming.	121
The Pelicans of Michigan	G. Stron.	124

A Few Observations on the Crested Flycatcher.

John C. Brown.	124	
A Vacation in Pennsylvania.	Herbert W. Congdon.	125
Ducks in Southern Wisconsin	Ned Hollister.	128
Notes from Maine	John L. Goodale.	129
Brief Notes, Correspondence and Clippings		130
The Flight of Birds.—A Reply.	J. Hobart Egbert.	131
Notes on the Sharp-shinned Hawk.	Wm. H. Fisher.	132

OCTOBER:

A Nest of Hen Hawks	Henry R. Buck.	133
Notes from Greenland	A. T. Bagerup.	135
Music on the Wing	Henry Aylett.	136
Something About Owls	C. O. Ormsbee.	137
The White-faced Glossy Ibis.	William L. Kells.	139
The Marsh Hawk	Rudolph M. Anderson.	140
A Day's Shooting	Claude G. Dunn.	140
A Day's Ramble	Philip D.	141
Brief Notes, Correspondence and Clippings		142

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